SPECIAL
COLLECTIONS

DOUGLAS
LIBRARY

QUEEN'S UNIVERSITY
AT KINGSTON

KINGSTON ONTARIO CANADA

Queen's University

KINGSTON, CANADA

INCORPORATED BY ROYAL CHARTER IN 1841

CALENDAR

OF

THE FACULTY OF ARTS

NINETY-FIRST SESSION

1931-32

CALENDAR CHANGES

	Page
Vaccination	34
New Pass Course	73
General Honour Examinations	74

Queen's University

KINGSTON, CANADA

INCORPORATED BY ROYAL CHARTER IN 1841

CALENDAR

OF

THE FACULTY OF ARTS

NINETY-FIRST SESSION

1931-32

PRINTED FOR THE UNIVERSITY BY THE JACKSON PRESS
KINGSTON
1931

DEPARTMENT OF DRAWING

PLAN OF QUEEN'S UNIVERSITY GROUNDS

1. Central Heating Plant
2. Hydraulic Laboratory
3. Observatory
4. Ban Righ Hall, Women's Residence
5. Theological Hall, Biological Laboratories, Museum and Convocation Hall
6. Principal's Residence
7. Anatomy and Pharmacology Building
8. Gymnasium
9. Medical Laboratories
10. Jock Harty Arena
11. Carruthers Hall (Civil Engineering)
12. Fleming Hall (Electrical Engineering)
13. Mining Laboratory (Mill)
14. Mechanical Laboratory
15. Nicol Hall (Mining and Metallurgy)
16. Gordon Hall (Chemistry)
17. The Douglas Library and Administration Offices
18. Ontario Hall (Physics, Geology, and Mineralogy)
19. Grant Hall
20. Kingston Hall (Arts Building)
21. The George Richardson Memorial Stadium
22. The Leonard Field
23. Kingston General Hospital and Richardson Laboratories
24. Students' Union
25. New Gymnasium
26. Miller Hall

TABLE OF CONTENTS

	Page
Plan of Queen's University Grounds	2
Academic Year	5
Calendar	7
Time-Table	8
History of the University	10
Government and Administration	13
The Board of Trustees	13
The University Council	13
The Senate	14
The Faculty Boards	15
Officers of Administration	16
Chancellor, Principal, ector, Vice-Principal, Registrar	16
The Board of Trustees	16
The University Council	18
The Senate	19
Officers of Instruction	21
Emeritus Professors	21
Instructors in the Faculty of Arts	21
Other Officers	28
Equipment and Special Facilities	29
The Library	29
The Museums	29
The Laboratories	30
The Observatory	30
Facilities for Field Work	30
General Information	32
Degrees	32
Hoods	32
Information for Women Students	33
Expenses	34
Boarding Houses	34
Extension Lectures	34
Physical Welfare of Students	34
Vaccination	34
Attendance at Church	35
Student Self-Government	35
Officers' Training Corps	35
Registration	35
Admission to the Faculty of Arts	36
Admission by Matriculation	36
Admission by Equivalent Examination	37
Admission to Advanced Standing	38
Admission by Special Regulation	39
Regulations Regarding Extra-mural Work	40

Page

TABULATED STATEMENT OF SUMMER AND WINTER COURSES. 47

THE SUMMER SCHOOL 51

FEES 53

SCHOLARSHIPS, PRIZES, AND MEDALS 55
Matriculation Scholarships 55
Scholarships in Arts 55
Special Scholarships 58
Prizes 63
Medals 66

GENERAL REGULATIONS 67
Special Students 67
Regulations regarding courses 67
Regulations regarding examinations 69

COURSES OF STUDY LEADING TO THE DEGREE OF BACHELOR OF ARTS ... 72
General Explanations 72
Synopsis of Courses 73
Requirements for a Pass B.A. Degree 73
Honour Courses leading to the Degree of Bachelor of Arts..... 74
Courses for Teachers' Certificates 78
Inspectors' Certificats 80
Courses in Commerce and Administration 80
Combined Course in Arts and Applied Science 80
Combined Course in Arts and Theology 81

DETAILS OF COURSES OF INSTRUCTION 83
Latin Language and Literature 83
Greek and Roman Civilization 90
Greek Language and Literature 87
Hebrew 91
Biblical Literature 92
Germanic Language and Literature 93
French Language and Literature 101
Spanish and Italian Languages and Literature 105
English Language and Literature 109
History 119
Political and Economic Science 131
Mental and Moral Philosophy 137
Mathematics 141
Physics 146
Chemistry 151
Biology 159
Bacteriology 166
Geology 167
Mineralogy 172

GRADUATE COURSES 175
Requirements for the degree of Master of Arts 175
Requirements for the degree of Doctor of Philosophy 178
DEGREES, MEDALS, SCHOLARSHIPS, AND PRIZES, 1930 179

THE ACADEMIC YEAR*

THE NINTY-FIRST SESSION of the University will begin on Wednesday, September 23rd, 1931, at 8 a.m. Convocation will be held on Wednesday, May 4, 1932.

1931

May 1—Written notice due at the Registrar's Office of candidates' intention to compete for Matriculation Scholarships.

July 3—Registration for Summer School. A fee of $3 will be charged to those registering later than the afternoon of the 4th, with additional fees, if any registrations are accepted, after the 6th.

July 6—Summer School opens at 8 a.m.

July 15—Last day for receiving applications, accompanied by fee, for September examinations, or degrees, from intra-mural and extra-mural students.

Aug. 21—Summer School closes at 5 p.m.

Aug. 29—Arts Supplemental examinations begin.

Sept. 10—Last day of registration for extra-mural students without extra fee.

Sept. 17—Last day of registration for extra-mural students with extra fee.

Sept. 21—Registration in Arts begins at 2 p.m. for students who are registering for the first time.‡

Sept. 22—Last day for registration of students registering for the first time.

Sept. 23—Registration of intra-mural students who have been registered in previous sessions (one day only).†

Sept. 24—Classes open in Arts at 8 a.m.

---

*The term "Academic Year" used in connection with Regulations and Courses of Study refers to the period extending from October 1 to September 30.

Oct. 3—Last day of registration for intra-mural students who have not previously obtained from the Faculty permission to register later.

‡Every student registering for the first time must submit a certificate of vaccination.

†The fee for late registration is $3 on September 24, with an additional fee of $1 for each day after that date up to October 3.

Oct. 31—Last day upon which applications for Rhodes Scholarships will be received by the Secretary of the Committee of Selections for the Province.

Nov. 2—Last day for receiving applications, accompanied by fee, from extra-mural students for December examinations.

Dec. 1—First day upon which extra-mural students may transfer to intra-mural classes.

Dec. 15—Mid-year examinations begin.

Dec. 21—Last day for receiving applications for the Robert Bruce Bursary.

Dec. 22—Christmas holidays begin at 5 p.m.

1932

Jan. 6—Classes re-open at 8 a.m.

Jan. 15—Last day for receiving applications from candidates for the M. C. Cameron Scholarship in Gaelic.

Feb. 15—Last day for receiving applications and fees from extra-mural students for the April examinations, and for degrees.

Mar. 15—Last day for receiving applications and fees for degrees from intra-mural students.

Mar. 25—Good Friday.

April 1—Last day for receiving manuscripts for University Prizes, applications for Arts Research Scholarships and theses for degree.

April 1—Class-work closes at 5 p.m.

April 5—Examinations begin.

April 11—Last day for extra-mural students to add classes for the Summer Session without extra fee.

April 18—Last day for extra-mural students to add classes for the Summer Session with extra fee.

April 30—Statutory meeting of the Senate for awarding Standing, Medals, Honours, and Degrees.

May 4—Convocation for conferring Degrees, announcing Honours, and distributing Prizes and Medals.

CALENDAR

1931

JANUARY						
S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
..	..	..	..	..	..	..

FEBRUARY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
..	..	..	..	..	..	..
..	..	..	..	..	..	..

MARCH						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	....	....	....	....
..	..	..	..	..	..	..

APRIL						
S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	....	....
..	..	..	..	..	..	..

MAY						
S	M	T	W	T	F	S
....	....	....	....	....	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	....	....	....	....	....	....

JUNE						
S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	..	..	..	..
..	..	..	..	..	..	..

JULY						
S	M	T	W	T	F	S
....	....	....	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	....
....	....	....	....	....	....	....

AUGUST						
S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

SEPTEMBER						
S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	....	....	....
....	....	....	....	....	....	....

OCTOBER						
S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
..	..	..	..	..	..	..

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	....	....	....	....	....
....	....	....	....	....	....	....

DECEMBER						
S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	....	....
....	....	....	....	....	....	....

1932

JANUARY						
S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

FEBRUARY						
S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	....	....	....	....	....
....	....	....	....	....	....	....

MARCH						
S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	....	....
....	....	....	....	....	....	....

APRIL						
S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	....	....	....	....	....	....

MAY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	....	....	....	....
....	....	....	....	....	....	....

JUNE						
S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	..	..
....	....	....	....	....	....	....

JULY						
S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

AUGUST						
S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..
....	....	....	....	....	....	....

SEPTEMBER						
S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	....
....	....	....	....	....	....	....

OCTOBER						
S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

NOVEMBER						
S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	..	..	..
....	....	....	....	....	....	....

DECEMBER						
S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
....	....	....	....	....	....	....

TIME TABLE OF LECTURES

When a Science class has only one or two lecture periods a week, the class number is followed by a designation of the day or days of meeting (M = Monday, Tu = Tuesday, etc.).

	Classes held on Mon., Wed. and Fri. at				Classes held on Tues., Thur. and Sat. at			
	8	9	10	11	8	9	10	11
Bacteriology		10, W, F						
Biblical Lit.				See	outlines of	work.		
Biology	12, M, W	11, M. W 45	14b, M, F 31a, 36		13, Tu, Th	1, Tu, Th 16, Th	2, Tu, Th 21, Tu, Th	17, Tu, Th
Chemistry		1 35, M, W	145, M	21, W, F 61 171a, M, F 101b, M, F	145, Tu	41, Tu, Th	141, Tu, Th 71, Tu, Th	2, Tu, Th 121, Tu, Th
Economics	1, 35b	32	2, 19b, 24b		11b, 12a	4, 10	16a	23b, 25a 39
English		2(A), 10a 14b	18 45a, 46b	3, 12, 35a 36b	1	2(B), 22a 24b	20b	17a, 28
French		1(Sec. A)	2(Sec. A) 8	10, 13		1 Sec. B) 25	2(Sec. B)	41
Geology		2 115, W, F	15, M 19, W	1, M, W		13, Tu, Th	10, Tu 15, Th	10, F, 18, Tu, Th, 15, Tu
German		21a, 22b	2	A	A	1	23a, 24b	
Greek			2	10, 25a, 46b		A	1, 62	32b, 40a
Greek & Rom. Civiliz'n		1						
Hebrew					1			
History	40a	12	13	3, 14a, 15b	2	16, 18a, 19b	20a, 21b	1, 25, 30a 31b
Italian								1
Latin		10, 41b 44a	1, 30a 100	32a, 40a, 45b		66	3	2, 51b
Mathematics	1, 12a, 14b 20b	Ast. 1 17b, 18a		10a, 11b	2, 15a, 16b	13a		3a, 7b
Mineralogy	2, F; 12, F 13. F		2, M, F	13, W, F 12, W, F			1, 2, Th	
Philosophy		1	10	44		25	29	2
Physics			12a, W, F 13b, W, F	16a, 20b		2	10b, Tu, Th 14a, Tu, Th	1, 21a 17b, Tu, Th

TIME TABLE OF LABORATORY WORK

The numbers in parentheses indicate the hours; an asterisk indicates another section on Saturday, 9-12.

	Mon.	Tues.	Wed.	Thur.	Fri.
Bacteriology			10 (1-4)	10a (1-3) 12b (1-3)	
Biology	1 (Sec. A, 2-4) 2 (Sec. B, 1-4) 21 (1-4) 12 (1-4)	13 (1-4)	1 (Sec. B, 1-4) 11 (1-4) 16 (2-4)	2 (Sec. A, 2-4)	14b (1-4) 16 (2-4) 17 (2-4) 32b (1-4)
Chemistry	61 (Sec. A, 1-4) 71 (1-4) 106b (1-4) 171a (1-4)	41 (Sec. A, 1-4) 61 (Sec. A, 1-3	2 (1-4) 3 (Sec. A, 1-5) 21 (1-4) 35 (Sec. A, 1-4) 41 (Sec. B, 1-4) 101b (1-4) 121 (1-4)* 145 (Sec. A, 1-4)	1 (1-3) 3 (Sec. B, 1-5) 35 (Sec. B, 1-4) 61 (Sec. B, 1-4) 145 (Sec. B, 1-4)	141 (1-4) 61 (Sec. B, 1-3)
Geology	14 (2-4)	10 (2-4)		115 (1.30-4.30)	
Mineralogy			11 (2-4)		1 (2-4) 13 (1-3)
Physics		1 (Sec. A, 1-3 or 3-5) 12a (3-5) 13b (3-5) 17b (Sec. A, 2-4)	1 (Sec. B, 3-5) 2 (Sec. A, 3-5) 17b (Sec. B, 2-4) 11 (1-3)	2 (Sec. B, 3-5) 10b (3-5) 14a (3-5)	

HISTORY OF THE UNIVERSITY

Queen's University owes its origin to the desire of the Synod of the Presbyterian Church in Canada, in connection with the Church of Scotland, for a ministry trained within the country. As early as 1832 the Provincial Government had been petitioned "to endow without delay an institution, or professorships, for he education and training of young men for the ministry in connection with the Synod." This and other representations failing of their object, steps were taken by the Synod to found a college at Kingston on the lines of the Scottish National Universities. On October 16, 1841, a Royal Charter was issued by Her Majesty Queen Victoria for the establishment of Queen's College, Kingston, and the first classes were opened in March, 1842, with the Rev. Dr. Liddell as Principal. Funds were provided in part by grants from the Presbyterian Church in Scotland and from the Canadian Government, and in part by liberal subscriptions from the friends of the young and growing University. In 1867-68, however, the withdrawal of the Provincial grant, and the failure of the Commercial Bank, almost brought financial disaster. But the crisis was met by the determination of Principal Snodgrass and of other self-denying workers, chief among whom was Professor Mackerras. The country was canvassed for subscriptions, and as a result of the widespread interest aroused, $113,000 was added to the endowment.

In 1877 Principal Snodgrass was succeeded by the Rev. G. M. Grant, who for a quarter of a century built with brilliant success upon the foundation laid by his predeessors. Under him the University gained rapidly in size and prestige. By 1881 Queen's had a new building, an enlarged staff, and a great inrease of students. In 1887, as the result of an effort in commemoration of the Queen's Jubilee, $250,000 was raised, resulting in further extension, and in the establishment of new professorships.

Principal Grant died in 1902, and was succeeded in the following year by the Very Rev. D. M. Gordon. In 1916, owing to ill-health, Principal Gordon resigned his position, but continued in office until the autumn of 1917, when Rev. R. Bruce Taylor, M.A., D.D., LL.D., was appointed as his successor. In 1930 Principal Taylor resigned his position to live abroad and Dr. J. C. Connell was appointed Acting Principal. He held this position for four months, until October, when W. Hamilton Fyfe, Head of Christ Hospital, England, was installed as Principal of the University.

In 1854 the Medical Faculty of Queen's was established. It was re-organized in 1865 as the Royal College of Physicians and Surgeons

in affiliation with the University, but in 1891 the original status was resumed. Excellent facilities for clinical work are provided in the General Hospital, Hotel Dieu, Ontario Hospital.

Queen's led the way in co-education. As early as 1870 special classes in English and other subjects were formed for women, but Courses leading to a degree were not thrown open to them until 1878-79. In 1880 co-education was extended to the medical course, and in 1883 a separate Women's Medical College was opened and affiliated with Queen's. It was closed, however, in 1894, as similar facilities were offered in Toronto and elsewhere.

The School of Mining was founded in 1893 under an Ontario Charter. For several sessions all its departments were housed in Carruthers Science Hall, which had been erected in 1891, but in view of the rapid growth of the School the Provincial Legislature in 1900 provided for its accommodation two large buildings, Ontario Hall for the Departments of Physics, Geology and Mineralogy and Fleming Hall for the Departments of Civil, Mechanical, and Electrical Engineering. More recently the Provincial Government erected Gordon Hall, which is entirely used for the teaching of Chemistry, and, through the generosity of Professor Nicol and other graduates, Nicol Hall has been built to provide class rooms and laboratories for the Department of Mining and Metallurgy. The School of Mining, which since 1893 had been under the control of a separate Board, was in 1916 amalgamated with the University, and now constitutes its Faculty of Applied Science.

In 1907 the Ontario Government established at Queen's a Faculty of Education for the purpose of providing professional training for teachers in the secondary schools of the Province. In 1920, however, the work of the Faculty was discontinued because of the decision of the Government to extend the scope of the Normal Schools and to create in Toronto the Ontario College for Teachers.

There is now on the University Campus a stately group of buildings, comprising the Old Arts Building (now the Theological Building); Carruthers Hall (Civil Engineering); Kingston Hall (New Arts), the gift of the city of Kingston; Grant Hall, erected by students, graduates, and friends in honour of Principal Grant; Ontario Hall (Physics, Chemical Engineering); Fleming Hall (Mechanical and Electrical Engineering); Gordon Hall (Chemistry); Nicol Hall (Metallurgy); the Medical Building (Anatomy, Pharmacology and Preventive Medicine); the Medical Laboratories Building; the new Gymnasium; Miller Hall (Geology and Mineralogy), named in memory of the late Dr. W. G. Miller; the Observatory; the Douglas Library, named in memory of Dr. James Douglas, a former chancellor of the University, who contributed $150,000 to its cost; Ban Righ Hall, the new residence for women, erected through the efforts of the Alumnae Association, and the Richardson Pathological

Laboratory. The Province of Ontario, besides its generous gifts of Ontario, Fleming, and Gordon Halls, referred to in an earlier paragraph, contributed $150,000 to the Douglas Library and $125,000 to the new Central Heating and Power Plant.

Queen's University, though founded by a Church, was dedicated to the nation. As its constituency expanded, its constitution was gradually broadened, until finally in 1912, as theresult of an amicable arrangement between the Presbyterian Church and the Trustees of the University, an act was passed by the Dominion Parliament removing the last vestige of denominational control.

The endowment of the University is at present about $2,250,000, of which about $900,000 was obtained in 1918-19. To this sum the late Chancellor Dr. Douglas contributed $500,000 and the Carnegie Corporation $250,000. In recent years the Province of Ontario has steadily increased its grants, and the annual income of the University, derived from all sources, is now nearly 700,000. The registration of students has grown from 665 in 1900 to over 3,800 in the present session, and Queen's has become nation-wide in its work and influence.

GOVERNMENT AND ADMINISTRATION

The administration of the University is vested in the Board of Trustees, the University Council, the Senate, and the Faculty Boards.

THE BOARD OF TRUSTEES

The Board of Trustees consists of *ex-officio* and elective members. The former are the Chancellor, the Principal, and the Rector. The latter consist of (1) one representative from each affiliated college, (2) representatives as provided for by the Statutes from (*a*) the University Council, (*b*) the Benefactors, (*c*) the Graduates, and (3) members elected by the Board of Trustees.

The functions of the Board of Trustees are to manage the finances, to possess and care for the property, to procure legislation, to appoint instructors and other officers, and in general attend to such external matters as do not relate directly to instruction.

THE UNIVERSITY COUNCIL

The University Council consists of the Chancellor, the Trustees, the members of the Senate, and an equal number of members elected by the Graduates from their own members.

The annual meeting of the Council is held on the Tuesday immediately preceding Convocation.

The Functions of the Council are:

(1) To elect the Chancellor, except when two or more candidates are nominated, in which case the election is by registered graduates.

(2) To elect six trustees, two of whom shall retire annually.

(3) To make by-laws governing the elections of (*a*) the Rector by the registered students, (*b*) four trustees by the benefactors, (*c*) six trustees by the University Council, (*d*) six trustees by the graduates.

(4) To discuss all questions relating to the University and its welfare.

(5) To make representation of its views to the Senate or the Board of Trustees.

(6) To decide on proposals for affiliation.

(7) To arrange all matters pertaining to (*a*) its own meetings and business, (*b*) the meetings and proceedings of Convocation, (*c*) the installation of the Chancellor, (*d*) the fees for membership, registration and voting.

THE SENATE

The Senate consists of:

The Principal.

The Vice-Principal.

The Principal of Queen's Theological College.

The Dean of the Faculty of Arts.

The Dean of the Faculty of Applied Science.

Three Professors elected by the Faculty of Arts.

Three Professors elected by the Faculty of Applied Science.

Three Professors elected by the Faculty of Medicine.

Two Professors elected by the Faculty of Queen's Theological College.

The Functions of the Senate are:

(1) To determine all matters of an academic character which concern the University as a whole.

(2) To consider and determine all courses of study leading to a degree, including conditions of Matriculation, on recommendation of the respective Faculty Boards; but the Senate shall not embody any changes without having previously presented these to the Faculty.

(3) To recommend to the Board of Trustees the establishment of any additional Faculty, Department, Chair, or Course of Instruction in the University.

(4) To be the medium of communication between the Alma Mater Society and the Governing Bodies.

(5) To determine all regulations regarding the social functions of the students within the University, and regarding the University Library and University Reading Rooms.

(6) To publish the University Calendars.

(7) To conduct Examinations.

(8) To grant Degrees.

(9) To award University Scholarships, Medals, and Prizes.

(10) To enforce the Statutes, Rules, and Ordinances of the University.

(11) And generally to make such recommendations to the Governing Boards as may be deemed expedient for promoting the interests of the University.

THE FACULTY BOARDS

The Faculty Boards are constituted as follows:

For the Faculty of Arts and for the Faculty of Applied Science the Dean, Professors, Associate Professors, Assistant Professors, and Lecturers of each Faculty (in Arts, after one year's experience,) have power to meet as separate boards, and to administer the affairs of each Faculty under such regulations as the Board of Trustees may prescribe.

For the Faculty of Medicine, the Dean, Professors, Associate Professors, and Assistant Professors have power to meet as a separate board, and to administer the affairs of the Faculty under such regulations as the Board of Trustees may prescribe.

The Principal and Vice-Principal are *ex-officio* members of each of the Faculty Boards.

The Functions of the Faculty Boards are:

(1) To recommend to the Senate courses of study leading to a degree, and the conditions of admission.

(2) To decide upon applications for admission or for change of course, subject to the regulations of the Senate.

(3) To submit to the Senate names for both ordinary and honorary degrees.

(4) To arrange the time-table for classes and to edit the Faculty Calendar, subject to the approval of the Senate.

(5) To control registration, and determine the amount of fees and manner of payment, subject to the regulations of the Senate and the approval of the Board of Trustees.

(6) To deal with class failures.

(7) To exercise academic supervision over students.

(8) To make such recommendations to the Senate as may be deemed expedient for promoting the efficiency of the University.

(9) To award Faculty Scholarships, Medals, and Prizes.

(10) To appoint within the limits of the funds made available by the Trustees such sessional assistants, fellows, tutors, and demonstrators as shall be needed to give instruction in the subjects taught by the Faculty.

(11) To pass such regulations and by-laws as may be necessary for the exercise of the functions of the Faculty.

OFFICERS OF ADMINISTRATION

CHANCELLOR

JAMES RICHARDSON, B.A., LL.D.

PRINCIPAL AND VICE-CHANCELLOR

W. HAMILTON FYFE, M.A., LL.D.,

RECTOR

OSCAR D. SKELTON, M.A., Ph.D.

VICE-PRINCIPAL AND TREASURER

W. E. MCNEILL, M.A., Ph.D.

REGISTRAR

ALICE KING

THE BOARD OF TRUSTEES

Chairman

J. M. MACDONNELL, M.A.

Secretary

W. E. MCNEILL, M.A., Ph.D.

Ex-officio Members

JAMES A. RICHARDSON, B.A., LL.D. ..... Chancellor
W. HAMILTON FYFE, M.A., LL.D. ..... Principal
O. D. SKELTON, M.A., Ph.D. ..... Rector

Retire 1931

REV. D. R. DRUMMOND, M.A., D.D.[6] ..... Hamilton
SENATOR A. C. HARDY[6] ..... Brockville
A. J. MEIKLEJOHN, B.A.[6] ..... Kingston
F. D. REID, B.Sc.[4] ..... Cobalt

Retire 1932

JACKSON BOOTH, ESQ.[2] ..... Ottawa
REV. G. A. BROWN[5] ..... Kingston
J. M. CAMPBELL, ESQ.[7] ..... Kingston
CAPT. JOHN DONNELLY, M.E.[4] ..... Kingston
T. H. FARRELL, M.D.[1] ..... Utica, N.Y.
W. F. NICKLE, B.A., K.C.[1] ..... Kingston
HON. MR. JUSTICE W. A. LOGIE, M.A., LL.B.[6] ..... Toronto
REV. LESLIE PIDGEON, D.D.[6] ..... Montreal
O. D. SKELTON, M.A., Ph.D., F.R.S.C.[3] ..... Ottawa
JAMES A. RICHARDSON, B.A., LL.D.[6] ..... Winnipeg, Man.

Retire 1933

H. A. CALVIN, ESQ.[2] ..... Toronto
R. CRAWFORD, B.A.[4] ..... Kingston
W. CURLE, M.A.[6] ..... Montreal
J. G. DWYER, M.D., LL.D.[6] ..... New York
SENATOR H. H. HORSEY, B.A.[1] ..... Ottawa
D. H. LAIRD, M.A., K.C.[1] ..... Winnipeg, Man.
JUDGE H. A. LAVELL, B.A.[3] ..... Kingston
J. M. MACDONNELL, M.A.[7] ..... Toronto
D. I. MCLEOD, B.A.[6] ..... Toronto
R. O. SWEEZEY, B.Sc.[3] ..... Montreal

Retire 1934

J. MACKINTOSH BELL, M.A., Ph.D., LL.D[7] ..... Almonte
J. C. CONNELL, M.A., M.D.[6] ..... Kingston
W. L. GRANT, M.A., LL.D.[2] ..... Toronto
SENATOR ANDREW HAYDON, M.A., LL.B.[6] ..... Ottawa
E. R. PEACOCK, M.A.[6] ..... London, Eng.
ALEXANDER LONGWELL, B.A., B.Sc.[1] ..... Toronto
D. M. MCINTYRE, LL.D., K.C.[1] ..... Kingston
J. M. FARRELL, B.A., K.C.[3] ..... Kingston
G. F. Henderson, B.A., K.C.[2] ..... Ottawa
CHARLOTTE E. WHITTON, M.A.[3] ..... Ottawa

---

[1]Elected by the University Council for three years.
[2]Elected by the Benefactors for four years.
[3]Elected by the Graduates for three years.
[4]Elected by the Board of Trustees to represent the Faculty of Applied Science for three years.
[5]Elected by the Faculty of Queen's Theological College for one year.
[6]Elected by the Board of Trustees for four years.
[7]Elected by Benefactors to represent the Faculty of Applied Science for three years.

THE UNIVERSITY COUNCIL

Registrar

J. M. FARRELL, B.A.

Ex-officio Members

THE CHANCELLOR

THE PRINCIPAL

THE MEMBERS OF THE BOARD OF TRUSTEES

THE MEMBERS OF THE SENATE

Elective Members

Retire 1932

H. A. CALVIN, ESQ. ..... Toronto
E. T. CORKILL, B.S., M.E. ..... Toronto
C. W. DRURY, B.Sc., Ph.D. ..... Toronto
JUDGE A. G. FARRELL, B.A. ..... Regina, Sask.
C. F. HAMILTON, M.A. ..... Ottawa
REV. J. W. MCINTOSH, M.A. ..... St. Johnsbury, Vt.
W. A. NEWMAN, B.Sc. ..... Montreal

Retire 1933

R. W. ANGLIN, M.A. ..... Toronto
D. D. CALVIN, B.A. ..... Toronto
*T. H. FARRELL, M.A., M.D. ..... Utica, N.Y.
SENATOR A. HAYDON, M.A., LL.B. ..... Ottawa
*SENATOR H. H. HORSEY, B.A. ..... Ottawa
F. KING, M.A., K.C. ..... Kingston
D. H. LAIRD, M.A. ..... Winnipeg
*W. F. NICKLE, B.A., K.C. ..... Kingston
MRS. G. SILVERTHORNE, B.A., M.D. ..... Toronto

Retire 1934

C. LAIDLAW, B.A., M.D. ..... Ottawa
R. W. BROCK, M.A., LL.D., F.R.S.C. ..... Vancouver, B.C.
JUDGE E. B. FRALECK, B.A. ..... Belleville
W. H. RANKIN, M.D., LL.D. ..... Brooklyn, N.Y.
T. A. MCGINNIS, B.Sc. ..... Kingston
LORNE PIERCE, M.A., Ph.D., LL.D., F.R.S.C. ..... Toronto

Retire 1935

DENNIS JORDAN, B.A., M.D. ..... Toronto
REV. NEIL M. LECKIE, B.A., B.D. ..... St. Mary's
MRS. J. MACGILLIVRAY, M.A. ..... Kingston
*D. M. MCINTYRE, B.A., LL.D., K.C. ..... Kingston
F. ETHERINGTON, M.D., C.M.G ..... Kingston
A. A. MACKAY, B.Sc. ..... Montreal
F. J. HOUSTON, M.D. ..... Hamilton
G. C. MONTURE, B.Sc. ..... Ottawa

Retire 1936

E. A. COLLINS, B.Sc. ..... Copper Cliff
REV. EBER CRUMMY, B.Sc., D.D. ..... Carberry, Man.
A. B. CUNNINGHAM, B.A. ..... Kingston
V. K. GREER, M.A. ..... Toronto
*ALEX. LONGWELL, B.A., B.Sc. ..... Toronto
R. K. PATTERSON, M.D. ..... Ottawa
MARION REDDEN, B.A. ..... Kingston
GORDON SMITH, B.A., B.Sc. ..... Kingston

Retire 1937

G. C. BATEMAN, B.Sc. ..... Toronto
A. E. DAY, M.A., K.C. ..... Kingston
W. C. DOWSLEY, M.A. ..... Brockville
J. G. DWYER, M.A., M.D., LL.D. ..... New York
W. S. KIRKLAND, M.A. ..... Toronto
MRS. H. A. LAVELL, B.A. ..... Kingston
REV. J. Y. MCKINNON, M.A., B.D. ..... Brantford
MRS. ETTA NEWLANDS, M.A. ..... Kingston

*Elected by the Council as their representatives on the Board of Trustees.

THE SENATE

Ex-officio Members

W. HAMILTON FYFE, M.A., LL.D. ..... Principal
W. E. MCNEILL, M.A., PH.D. ..... Vice-Principal
JOHN MATHESON, M.A. ..... Dean of the Faculty of Arts
ARTHUR L. CLARK, B.Sc., Ph.D. ..... Dean of the Faculty of Applied Science
FREDERICK ETHERINGTON, M.D., C.M.G., Dean of the Faculty of Medicine
REV. H. A. KENT, M.A., D.D., Principal of Queen's Theological College

Elective Members

The Faculty of Arts

E. L. BRUCE, M.A., Ph.D. ..... Retires 1932
J. A. MCRAE, M.A., Ph.D. ..... Retires 1933
P. G. C. CAMPBELL, M.A. ..... Retires 1934

The Faculty of Applied Science

L. M. ARKLEY, M.Sc. ..... Retires 1932
D. M. JEMMETT, M.A., B.Sc. ..... Retires 1933
A. JACKSON, B.Sc. ..... Retires 1934

The Faculty of Medicine

THOMAS GIBSON, M.D. ..... Retires 1932
L. J. AUSTIN, F.R.C.S. ..... Retires 1932
D. C. MATHESON, M.B. ..... Retires 1932

Queen's Theological College

REV. J. M. SHAW, D.D. ..... Retires 1932
REV. S. W. DYDE, M.A., D.Sc. ..... Retires 1933

OFFICERS OF INSTRUCTION

I—EMERITUS PROFESSORS

D. H. Marshall, M.A., F.R.S.E.,
Emeritus Professor of Physics,
Elm Tree House, Union Street W.

James Cappon, M.A., LL.D., F.R.S.C.,
Emeritus Professor of English,
26 Barrie Street.

A. P. Knight, M.A., M.D., F.R.S.C.,
Emeritus Professor of Physiology,
52 Queen's Crescent

W. L. Goodwin, D.Sc., F.R.S.C.,
Emeritus Professor of Chemistry,
Montreal

John Watson, M.A.(Glasgow), LL.D. (Glasgow, Toronto), D.D.(Knox), D.Litt.(Michigan),
Emeritus Professor of Moral Philosophy,
96 Bagot Street.

Rev. W. G. Jordan, B.A. (London), D.D. (Queen's),
Emeritus Professor of Hebrew Literature,
The Avonmore, William Street.

II—INSTRUCTORS IN THE FACULTY OF ARTS

John Matheson, M.A. (Queen's),
Professor of Mathematics and Dean of the Faculty of Arts,
51 Queen's Crescent.

P. G. C. Campbell, M.A. (Oxon), Docteur de l'Université de Paris,
Professor of French Language and Literature,
University Grounds

T. Callander, M.A. (Aberdeen, Oxon),
Professor of Greek Language and Literature,
Maitland Street.

A. L. CLARK, B.Sc. (W.P.I.), Ph.D. (Clark), F.R.S.C.,
Professor of Physics and Dean of the Faculty of Applied Science,
200 Albert Street.

W. T. MACCLEMENT, M.A. (Queen's), D.Sc. (Armour Institute),
The John Roberts Allan Professor of Biology,
University Grounds.

M. B. BAKER, B.A., B.Sc. (Queen's), F.G.S.A.,
Professor of Geology,
120 University Avenue.

A. C. NEISH, B.A. (Queen's), M.A., Ph.D. (Columbia),
Professor of Chemistry,
181 King Street W.

R. O. JOLLIFFE, M.A., Ph.D. (Chicago),
Professor of Latin,
200 Frontenac Street

E. L. BRUCE, B.Sc., B.A. (Queen's), M.A., Ph.D. (Columbia), F.R.S.C., F.G.S.A.,
The Miller Memorial Research Professor in Geology,
98 Bagot Street.

D. A. MCARTHUR, M.A. (Queen's), F.R.Hist.S.,
The James Douglas Professor of History,
115 L. Union Street

G. HUMPHREY, M.A. (Oxon), Ph.D. (Harvard),
The John and Ella G. Charlton Professor of Philosophy,
7 Wellington Street

G. H. CLARKE, M.A., D. Litt. (McMaster), F.R.S.C.,
Professor of English,
90 Queen's Crescent.

L. F. GOODWIN, Ph.D. (Heidelberg), A.C.G.I., F.I.C.,
Professor of Physical and Industrial Chemistry,
311 King Street West.

G. B. REED, M.A., Ph.D. (Harvard),
Professor of Bacteriology.
218 Albert Street.

J. H. BROVEDANI, Docteur ès Lettres (Rennes),
Professor of Spanish and Italian Languages and Literature,
Queen's University.

W. A. MACKINTOSH, M.A. (Queen's), Ph.D. (Harvard),
The Sir John A. Macdonald Professor of Political and Economic Science,
602 Earl Street

H. A. KENT, M.A., D.D.,
Professor of Hebrew and Biblical Literature,
148 Barrie Street

W. C. BAKER, M.A. (Queen's),
Professor of Experimental Physics on the Robert Waddell Foundation,
135 Centre Street.

C. F. GUMMER, M.A. (Oxon), Ph.D. (Chicago),
Professor of Mathematics,
149 Collingwood Street.

J. A. GRAY, D.Sc. (Manchester),
Chown Science Research Professor (Physics),
26 Wellington Street

JAMES A. ROY, M.A. (Edinburgh),
Professor of English,
127 King Street West

J. K. ROBERTSON, M.A. (Toronto),
Professor of Physics,
105 Albert Street.

J. A. MCRAE, M.A. (Queen's), Ph.D. (Manchester).
Professor of Chemistry,
226 Frontenac Street.

H. L. TRACY, B.A. (Toronto), Ph.D. (Chicago),
Professor in Classics,
332 University Avenue.

N. MILLER, M.A. (Queen's), Ph.D. (Harvard),
Professor of Mathematics,
28 Kensington Avenue.

R. O. EARL, B.A. (Queen's), M.Sc. (Chicago), Ph.D. (Chicago)
Professor of Biology,
313 King Street West.

J. E. HAWLEY, M.A. (Queen's), Ph.D. (Wis.),
Professor of Mineralogy,
99 Centre Street.

O. L. BOCKSTAHLER, M.A. (Mich.),
Acting Professor of German,
172 Barrie Street.

R. G. TROTTER, B.A. (Yale), M.A., Ph.D. (Harv.),
Associate Professor of History,
94 Barrie St.

A. E. PRINCE, M.A. (Manchester), B. Litt. (Oxen.),
Associate Professor of English History,
35 Edgehill

C. E. WALKER, C.A.,
Associate Professor of Commerce,
80 College Street.

H. ALEXANDER, M.A. (Liverpool),
Associate Professor of English,
82 Queen's Crescent.

R. G. H. SMAILS, B.Sc.(Econ.)(London), A.C.A.(Eng.),
Associate Professor of Commerce,
52 Kensington Avenue.

E. FLAMMER, B.Sc. (Calif.), Ph.D. (Harvard),
Professor of Mathematical Physics.
68 Collingwood Street.

B. ROSE, B.Sc. (Queen's), Ph.D. (Yale),
Associate Professor of Geology,
208 Albert Street.

C. A. CURTIS, B.A. (Toronto), Ph.D. (Chicago),
Associate Professor of Commerce,
130 Bagot Street.

N. McL. ROGERS, M.A., B.Litt., B.C.L.(Oxon),
Associate Professor in Political Science and History,
163 University Avenue.

W. M. CONACHER, B.A. (London),
Associate Professor of French.
295 Alfred Street.

A. B. KLUGH, M.A (Queen's), Ph.D. (Cornell),
Associate Professor of Biology,
117 Bagot Street.

M. TIROL, Bachelier es Lettres (Paris), B.A., Ph.D. (Lond.),
Associate Professor of French,
174 Earl St.

K. P. JOHNSTON, M.A. (Queen's),
Assistant Professor of Mathematics,
213 Queen Street.

WILHELMINA GORDON, M.A. (Queen's),
Assistant Professor of English,
122 University Avenue

G. B. FROST, B.A. (Tor.), Ph.D. (Cal.),
Assistant Professor of Chemistry,
Annandale Apts., Sydenham Street.

F. A. KNOX, B.A. (Queen's),
Assistant Professor in Economics,
207 L. William Street.

L. A. MUNRO, M.A.(Dal.), Ph.D.(McGill),
Assistant Professor of Chemistry,
148 University Avenue.

HILDA C. LAIRD, B.A. (Queen's),
Dean of Women and Assistant Professor in German,
Ban Righ Hall

R. L. DORRANCE, B.A. (Toronto),
Assistant Professor in Chemistry,
233 Johnston Street.

L. E. LAW, B.A. (London and Oxford),
Assistant Professor in Classics,
181 University Avenue.

MARY L. MACDONNELL, M.A. (Queen's),
Lecturer in Classics,
104 Queen's Crescent.

H. F. SUTHERLAND, M.A. (Glasgow), B.A. (Oxford),
Lecturer in Politics,
310 University Avenue.

G. L. EDGETT, M.A. (Mt. Allison), Ph.D. (Ill.),
Lecturer in Mathematics,
232 Johnson St.

J. D. STEWART, M.A. (Queen's),
Lecturer in Mathematics,
404 Albert St.

H. M. CAVE, M.A. (Queen's), Ph.D. (Cantab.),
Lecturer in Physics
24 Stewart Street.

E. E. WATSON, M.Sc. (McGill),
Lecturer in Physics,
313 Brock Street.

B. W. SARGENT, M.A. (Queen's),
Lecturer in Physics,
310 Victoria Street.

E. E. DUTHIE, M.A. (Aberdeen),
Lecturer in English,
181 University Avenue

J. AITKEN, B.A. (B.C.), M.B.A. (Wash.),
Lecturer in Political and Economic Science,
407 Earl Street.

R. A. INGALLS, B.A. (Acadia),
Lecturer in Biology,
308 University Avenue.

C. R. TRACEY, B.A. (Toronto),
Lecturer in Latin,
229 Albert Street.

REV. J. O. WATTS, M.A. (Cantab.),
Lecturer in Mathematics and Physics
Y. M. C. A.

MRS. ETTA NEWLANDS, M.A. (Queen's),
Instructor in Mathematics,
25 Concession Road

JEANNE M. MCCONNELL, B.S., C.A.P.,
Instructor in French,
31 Ellerbeck Street.

J. BEWS,
Physical Instructor for Men,
College Street.

ETHELWYNNE MURPHY,
Physical Instructor for Women,
218 Union Street.

TUTORS

Tutors in Latin: W. H. Showman, J. H. Stewart, Margaret McQuade, Doris Honeywell.

Tutor in German: Mary Dean.

Tutor in French: Mary Rayson.

Tutors in Spanish: Mary F. Beatty, Margaret O'Connor, Emily Williams.

Tutors in English: Alma Graham, Ursula Brennan, Mary Chown, Margaret Davis, Marion Duthie, Anna C. Johnson, Mary Macgillivray, A. C. D. Nicholson, Margaret Seager, G. W. L. Nicholson.

Tutors in History: R. M. Winter, Anna Faust, T. D. Walter.

Tutors in Economics: J. S. Craig, Aileen Engler, G. Falkner, A. B. Handler, G. Watts.

Tutor in Philosophy: L. P. Valiquet.

Tutors in Mathematics: D. F. Bleecker, D. I. Matheson, Mrs. N. Miller, A. T. Ashley, A. G. Bishop, J. R. Black, W. C. Brown, H. D. Heffernan, J. W. Henderson, K. M. McIlraith.

Tutors in Chemistry: R. S. Bull, M. G. Allmark, M. B. Atamian, Mary Baker, Florence Cottee, Betty Gordon, A. E. Buckle, W. R. Conn, K. Marsh, M. Mercer, G. Mervyn, W. F. Mitchell, H. E. Swerdfeger, J. C. Thom, F. G. Wallace, P. Wenger, G. H. Hamilton, R. E. Helmer, A. N. Langford, C. R. Lounsbury, P. E. Moss, P. L. MacLachlan, J. D. MacLachlan.

Tutors in Physics: J. S. Marshall, W. G. Manning.

Tutors in Biology: P. L. MacLachlan, J. D. MacLachlan, Mary Baker, E. O. Ebersole, Viola Culp.

OTHER OFFICERS

Librarian

E. C. KYTE

Curators of the Library

PRINCIPAL FYFE, PRINCIPAL KENT, VICE-PRINCIPAL MCNEILL, DEAN CLARK, DEAN MATHESON, DEAN ETHERINGTON, PROFESSORS TROTTER, ROY, MACPHAIL, JAMES MILLER, AND J. R. WATTS

Curators of the Museum

THE PROFESSORS OF BIOLOGY AND GEOLOGY

The Observatory Board

THE PRINCIPAL AND THE PROFESSOR OF ASTRONOMY

Director of the Summer School

PROFESSOR MACCLEMENT

Director of Extension Work

H. M. THOMAS, B.A. (Queen's)

Superintendent of Buildings

JAMES BEWS

Secretary-Treasurer Athletic Board of Control

C. C. HICKS

EQUIPMENT AND SPECIAL FACILITIES

THE LIBRARY

The University Library was removed from the Old Arts building to the new Douglas Library building during the summer of 1924. The new building provides one large reading room, three smaller ones, a number of conference rooms, exhibition roow and oices for the library and administrative staff.

In the main reading room will be found a collection of some 5,000 volumes of general reference works on open shevles. The main collection, shelved on five tiers of book-stalls, occupies the centre of the building. The general library now includes about 150,000 volumes as well as many original manuscripts and prints.

The system of classification used is that of the Library of Congress.

Seven hundred and fifty journals and other serials are currently received.

In addition to the general library there are departmental libraries for physics; chemistry; mining and metallurgy; geology and mineralogy; civil, mechanical and electrical engineering.

The library of the Medical Faculty, now in the Douglas Library building, has its own reading room, and is administered by the staff of the general library.

The Lorne Pierce Collection of Canadian Literature is very rich in first editions, original manuscripts and rare Canadiana.

The Shortt-Haydon Collection of portraits and views relating to Canada is one of the finest collections of its kind in existence.

THE MUSEUMS

The Biological and Ethnological Museum on the first floor of Theological Hall, has a large Botanical collection illustrating fully the flora of North America, Europe, Asia, South Africa, and Australia; a Zoological collection representing the Canadian fauna by a large number of prepared specimens of mammals, birds, reptiles, fishes, insects, and mollusca; and an Ethnological collection of weapons, utensils, dresses, and ornaments.

A splendid building in memory of the late W. G. Miller has recently been erected for the departments of Geology and Mineralogy. On the main floor is a large museum containing many fine specimens of minerals, ores, rocks, and fossils.

THE LABORATORIES

The Biological Laboratories are in Theological Hall, and are provided with material for dissection and with microscopes and other instruments.

The Chemical laboratories are in Gordon Hall. On the third floor are two laboratories for General Chemistry, one for Medical Chemistry, and one for Electro-Analysis. On the second floor are two for Quantitative Analysis, one for Organic Chemistry, one for Food and Water Analysis, and one (not yet equipped) for whatever future development demands. On the first floor are three for Qualitative Analysis, one for Industrial Chemistry, one for Phyisacl Chemistry, one for Gas Analysis, one for Spectroscopy, and one dark room for Photography. Besides these there are small separate laboratories for research work.

The Physical laboratories are in the southern half of Ontario Hall. The first and third floors are used for undergraduate laboratory work. In the basement and on the second floor rooms are set apart for research and other special work.

THE OBSERVATORY

The Observatory has a transit room, a computing room, and an equatorial room with revolving dome. The equatorial telescope has a six-inch objective, declination and right ascension circles, and a driving clock. The transit has a three and a half inch objective. The further equipment consists chiefly of a striding level, a chronograph, a mean time clock, and a sidereal time clock.

FACILITIES FOR FIELD WORK

Geology and Mineralogy. In the vicinity of Kingston a greater variety of economic minerals and metalliferous ores is mined than in any similar area in anada. Through the kindness of the managers the various mines may be visited by the Geology and Mineralogy classes, and students may thus obtain valuable information concerning field conditions.

Botany. The great diversity of land surface in the vicinity of Kingston enables the students of Botany readily to make field studies of the various plant associations. Within two miles of the city limits are

extensive reed marshes, bordered by water gardens well stocked with the swimming and submerged societies of plants. A drive of eight miles permits the study of an excellent example of sphagnum moor, with all the plants of our latitude characteristic of muskeg conditions. An hour's drive in another direction reaches a region of high, dry, granite hills where xerophytic modifications dominate the flora. A carefully preserved mesophytic meadow with a forest plantation is within walking distance of the University.

FACILITIES FOR ATHLETICS

The University provides ample facilities for athletics. A new gymnasium, one of the finest in Canada, was built during the summer of 1930. In the University Grounds is a large covered skating rink with artificial ice. A block from the University is the football field, with the George Richardson Memorial Stadium given by Mr. James Richardson in memory of his brother, Captain George Richardson, a Queen's graduate and a former athlete, who was killed in the Great War. There is room and equipment for all students who wish to take part in football, hockey, basketball, tennis, track athletics, swimming, boxing, fencing, or wrestling.

GENERAL INFORMATION

DEGREES

By the Royal Charter granted to Queen's College, it is "willed, ordained, and granted, that the said College shall be deemed and taken to be an University, and that the students in the said College shall have liberty and faculty of taking the degree of Bachelor, Master, and Doctor in the several Arts and Faculties."

The degrees at present conferred under the statutes of the University are as follows:

I.—HONORARY DEGREES

Doctor of Divinity, D.D.; Doctor of Laws, LL.D.

II.—DEGREES BY EXAMINATION

1.—In Arts

Bachelor of Arts, B.A.; Bachelor of Commerce, B.Com.; Master of Arts, M.A.; Doctor of Philosophy, Ph.D.

2.—In Theology

Bachelor of Divinity, B.D.

3.—In Medicine

Doctor of Medicine, M.D.; Master of Surgery, C.M.; Diploma of Public Health, D.P.H.; Doctor of Science, D.Sc.

4.—In Applied Science

Bachelor of Science, B.Sc.; Master of Science, M.Sc.

HOODS

Each Degree has its distinctive hood, as follows:
B.A.—Black, bordered with red silk.
B.Com.—Black, bordered with green silk.
M.A.—Black,, lined with scarlet silk, bordered with scarlet.
B.D.—White, bordered with crimson plush.
M.D. and C.M.—Scarlet, bordered with white.
B.Sc.—Black, bordered with yellow (old gold) silk.
M.Sc.—Black, lined with yellow, bordered with yellow.
D.Sc.—Yellow silk, bordered with black.
D.D.—Purple silk, lined with white silk, bordered with white.
LL.D.—Black silk, lined with blue silk, bordered with blue.
Ph.D.—Black silk, lined with purple, bordered with white.

INFORMATION FOR WOMEN STUDENTS

The Dean of Women is ready to give women students information and advice regarding any matter pertaining to their life at the University. She should be consulted about the planning of courses and should be notified concerning cases of illness.

The University Residences

Rooming and Boarding Houses

All first year women students under twenty-five and not resident in the city of Kingston are required to live in Ban Righ Hall or in one of its annexes.

(For the purpose of this regulation students who have credit for five or more classes at the University, taken either intra-murally or extra-murally, will not be considered to belong to the first year.)

All other women students not resident in the city of Kingston are required to live either in one of the university residences or in a supervised rooming or boarding house.

The above regulations apply to the winter session only. During the summer the university residences are open for the benefit of all women students attending the Summer School and of students taking physical culture and Upper School courses.

Particular attention is called to the regulation that women students are under no circumstances permitted to lodge in houses in which men students are living or in which any men are lodging. This applies to the Summer School as well as to the regular winter session.

Application forms for admission to the university residences, full information concerning the residences, the rates charged and rules in force, lists of supervised rooming and boarding houses for the winter session, with information concerning the regulations governing them, and lists of recommended rooming and boarding houses for the Summer School can all be obtained from the office of the Dean of Women.

Academic Dress

During the winter session women students are expected to wear academic gowns at lectures. These gowns may be ordered in Kingston after the opening of the session or they may be made from patterns purchased through the Dean of Women's office.

Gymnasium Costume

The correct gymnasium costume for women students consists of a navy blue tunic with blue girdle, close-fitting black knickers, white sport

shirt, black stockings and white gymnasium shoes (Oxfords). This costume should be bought after coming to the University. The cost of the outfit, without shoes and stockings, is $9.00.

Grey cotton bathing suits must be worn in the University swimming pool. These can be obtained at the gymnasiums for $1.00.

EXPENSES

At the present time the average student pays for table board from $5.00 to $6.00 a week, and for room from $2.50 to $3.50 a week.

See FEES for other expenses.

Lists of Boarding Houses for men students may be obtained from the Registrar. Meals may be obtained at the cafeteria in the Students' Union.

EXTENSION LECTURES

Members of the staff are prepared to lecture at outside points on a great variety of subjects. The lectures are specially suitable for University extension work, for courses of study planned by various organizations, and for teachers' conventions. A complete programme of lectures and full information on any point connected with them will be supplied upon application to the Registrar, Queen's University.

PHYSICAL WELFARE OF STUDENTS

Every student is required upon registration to contribute $4 towards a health insurance fund which the University will use to provide medical care for those who are ill. Details of the plan will be available at registration.

All students in their first year are required to take physical training for two hours a week, unless excused on account of military training with the Officers' Training Corps. They are examined by the University physician, who prescribes proper exercises to correct physical defects.

VACCINATION

Every student registering for the first time must submit evidence of successful vaccination.

ATTENDANCE AT CHURCH

All students are expected to attend a church of the denomination to which they belong.

During the session, Sunday services are conducted in the University by representatives of different denominations who are invited to preach to the students, professors, and visitors.

STUDENT SELF-GOVERNMENT

Queen's was the first University in Canada to introduce student self-government. All students are members of the Alma Mater Society, the chief instrument of student government, and are expected to share in its duties and responsibilities.

THE CANADIAN OFFICERS TRAINING CORPS

The Queen's University Contingent of the C.O.T.C., formed at the outbreak of the Great War under Lieut.-Col. A. B. Cunningham, was organized as a Unit of the Militia in February, 1915. Reorganized after the war by Col. A. Macphail, C.M.G., D.S.O., it is now commanded by Lieut. Col. P. G. C. Campbell, and consists of three companies, "A" Coy. (Arts), "B" Coy. (Medicine), and "C" Coy (Science).

The training, after the recruit year, prepares for the examination for "A" and "B" Certificates in Infantry and the Medical Service, the first qualifying for the rank of Lieutenant, the second for that of Captain. Commissions in the Permanent Force are offered from time to time to qualified members of the C.O.T.C. Students who enrol in their first year, complete the year's training, and are returned as fully efficient, are excused from Physical Training.

REGISTRATION

All students are required at the beginning of each session to have their names entered upon the University Register.

Intra-mural students must register *in person*, paying full fees for the session. Those registering before the opening of the session will be charged the regular fee, but those registering on or after the first day of session will be charged an extra fee of $3. In addition, those who have not previously obtained permission to defer registration must pay a special late fee of $1 a day from September 25 to October 3. No student may register after October 3 unless he has obtained special permission before the opening of session.

For Extra-mural registration see Regulations regarding Extra-mural Work.

ADMISSION TO THE FACULTY OF ARTS

1. Candidates desiring to enter the Faculty of Arts should make application during the summer on forms supplied by the Registrar.

The application should be accompanied by matriculation or other certificates.* These will be returned when the candidate's standing is determined.

I—ADMISSION BY MATRICULATION

2. Matriculation examinations are conducted for the Universities of Ontario by the University Matriculation Board. Details regarding these examinations may be found in a separate publication entitled REQUIREMENTS FOR MATRICULATION. This also contains a list of the Matriculation Scholarships and the conditions of award.

3. The Matriculation examinations are of two grades, elementary and advanced, called respectively *Pass* and *Honour* Matriculation.

A. Pass Matriculation

4. The subjects of Pass Matriculation are as follows: *Latin, English, Canadian and Ancient History* (with Music as an option for Ancient History), *Mathematics*, and any two of the following: *Greek, German, French, Spanish or Italian, Experimental Science* (Physics and Chemistry) or *Agriculture.*

Two papers are set in each of the six subjects and the pass standard is fifty per cent. in each paper.

5. A candidate who presents a certificate of Pass Matriculation will be admitted to the first year in Arts and may expect to graduate in four years.

---

*Candidates holding certificates from the Department of Education of Ontario should send their certificates to the Registrar, Queen's University, in order to have standing allowed. Candidates holding certificates from Departments of Education outside of Ontario should write to the Departments concerned asking that their marks be sent to the Registrar, who will then advise regarding the standing allowed.

B. Honour Matriculation

6. Honour Matriculation examinations are held in the following subjects:

Latin (two papers), *English* (two papers), *Modern History* (one paper), *Mathematics* (Algebra, Geometry, Trigonometry, and Problems, one paper in each), *Greek* (two papers), *German* (two papers), *French* (two papers), *Spanish* (two papers), *Physics* (one paper), *Chemistry* (one paper), *Biology* (one paper in each of Zoology and Botany).

The pass standard is fifty per cent. in each paper.

7. Subject to the modifications in sections (*a*) and (*b*) a candidate who enters with Honour Matriculation credits will on payment of the *pro tanto* fee be allowed all subjects up to five in which he has made fifty per cent. on each paper.

(*a*) Only a *pro tanto* allowance will be given in Physics 1, Chemistry 1, to students proceeding to course 2 in these subjects. The Departments concerned will grant exemption from all or part of the first year in these classes on presentation of evidence regarding the work previously covered. Ordinarily, however, the only exemption is from class attendance and the student must do the laboratory work and pass the examinations, though at the same time he may take course 2.

In Biology a full course is granted to students who are not going on to any further work in Biology. Those proceeding to higher work receive no allowance but have the privilege of taking Biology 1 and 2 together with four other courses in the one year.

(*b*) Mathematics 1 may be granted on any two papers of Upper School Mathematics to a candidate who will not proceed to higher work in that subject, or take Physics 2 or Chemistry 41.

8. A candidate with Honour Matriculation in four or five subjects may expect to graduate in three years if he is on a Pass Course.

9. Students who are subject to the requirements of 7 (*a*) will be allowed to register for five other courses in a year.

10. Students who desire credit towards a degree on work done outside of the University must pay a *pro tanto* fee of ten dollars.

11. No allowance will be given for credits on Honour Matriculation or similar non-academic examinations if such credits are earned subsequent to a candidate's first registration at Queen's University.

II—ADMISSION BY EQUIVALENT EXAMINATION

A. Examinations Equivalent to Pass Matriculation

12. The following certificates are accepted for Pass Matriculation in the subjects which they cover provided that 50% has been made in each paper.

Alberta	Third Year High School.
British Columbia	Grade XI.
Manitoba	Grade XI.
New Brunswick	First Class License.
Newfoundland	Associate (Junior).
Nova Scotia	Grade XI (average 60, minimum 50).
Ontario	Entrance to Normal School.
Prince Edward Island	Honour Diploma or First Class License or Second Year Certificate from Prince of Wales College.
Quebec	The University School Leaving. Grade XI Diploma.
Saskatchewan	Second Class, Third Form High School.

B. Examinations Equivalent to Honour Matriculation

13. The following certificates are accepted for Honour Matriculation in the subjects in which at least fifty per cent. has been made in each paper.

Alberta	Fourth Year High School.
British Columbia	Grade XII.
Manitoba	First Class.
New Brunswick	Grammar School.
Newfoundland	Associate Grade.
Nova Scotia	Grade XII.
Ontario	Upper School.
Prince Edward Island	Honour Diploma of Third Year. Prince of Wales College.
Saskatchewan	First Class, Fourth Form High School.

III—ADMISSION TO ADVANCED STANDING

14. A student applying for admission to advanced standing with allowance on credits at another University must have an official certificate of standing forwarded to the Registrar for consideration with a statement of honorable dismissal. He will be given equivalent standing but must comply with all regulations of Queen's University governing the Course he wishes to complete.

No credits obtained at another institution will be accepted for any of the last five classes offered by a candidate for degree at Queen's.

IV—ADMISSION BY SPECIAL REGULATION

15. Unmatriculated students who present certificates showing that they are over the age of twenty-one, may be admitted if they satisfy the Board of Studies that they can profitably undertake university work.

A candidate admitted under this Regulation must, with the exceptions noted below, obtain credit in course 1 of the subjects in which he lacks matriculation, in order to remove his entrance condition. In the case of Latin, French, and Mathematics, however, he must within two years pass the regular matriculation examinations. Preparatory classes in these subjects, if offered, carry no credit and no not admit to course 1.

REGULATIONS REGARDING EXTRA-MURAL WORK

All inquiries regarding regulations should be addressed to the Registrar.

In order to meet the needs of students who are unable to do all their work in residence, of teachers in actual service who wish to improve their professional qualifications in certain subjects, and of those persons in general who, though unable to attend the regular classes, are yet desirous of pursuing particular studies under competent direction, the University conducts a system of extra-mural instruction. This work is as nearly as possible identical with that taken up by the intra-mural students and the same examinations are set for all. Candidates who fulfil at least the minimum requirements of residence and otherwise comply with the conditions stated below may qualify for the various degrees to which their Courses lead.

For details of the work offered for the summer of 1931 and winter 1931-32 see page 48.

Conditions of Admission to Extra-mural Work

1. In order to register for the first time extra-mural students must be twenty-one years of age and residents of Canada. Students residing outside of Canada, however, who have attended the University for one session or who have taken work extra-murally for one session are allowed to complete their Course.

2. Fully matriculated students under twenty-one years of age may be allowed to register on satisfying the Faculty that they are unable to attend the University until a later date.

A student over twenty-one years of age who is not a candidate for a degree or diploma may register without matriculation standing in any course in which he desires to improve his scholarhip, provided that he can satisfy the Board of Studies of his ability to proceed with the work desired.

3. Except with the permission of the Board of Studies, no one is permitted to take work at Queen's in the same year as he is taking work at any other educational institution or writing on any outside examination other than Pass Matriculation.

4. An intra-mural student may become an extra-mural student only by special permission of the Faculty. A student registered intra-murally

in the winter session will not be allowed to continue his course extra-murally in the following summer, unless by special permission he has been allowed to postpone one or two courses until the summer. In such case, however, he must attend the Summer School. But any student may, in preparation for the September Supplemental examinations, register for instruction in courses in which he failed in the sessional examinations of the previous December or April, if they are offered extra-murally in the summer.

Registration in Extra-mural Courses

5. Application for registration must be made on forms supplied by the Registrar, and must satisfy the conditions stated in section 6. They must reach the University by the dates mentioned in section 7; and they must be accompanied by the fees specified in section 8.

6. (*a*) An extra-mural student may not register for more than four courses in the academic year. He may register in the winter (September-April) for as many as two courses or four half-courses, and in the Summer* (April-September) for two courses or three half-courses.

(*b*) The courses selected in each year are subject to approval of the Board of Studies and, in the case of candidates for degrees, must conform to the regulations for concentration, distribution, and sequence of work.

(*c*) Courses 1 and 2 in any subject except History, Economics, and Philosophy must be taken in different academic years.

(*d*) Before registering a student should consult the time-table of lectures, as he must not register in two classes which meet at the same hour. The winter time-table is given in the Arts Calendar, and the summer time-table in the Summer School Announcement.

7. (*a*) Extra-mural students should register two or three weeks before the session opens in order that they may receive the preliminary instructions and provide themselves with books in time to start work promptly. They will be allowed to register up to September 10 for the winter or April 10 for the summer at the regular fee, and up to September 17 or April 17 on payment of an extra fee of $3. Only under

*The Calendar is issued in the spring but is not in force until the following autumn. The work of advanced whole courses, however, given at Summer School, will be based on the prescription in the calendar for the next session, since these courses must be completed during the following winter.

exceptional circumstances and by special permission of the Faculty will registration be accepted after these dates.

(b) Extra-mural students cannot receive the examination returns before the last date of registration but should send fees to the Registrar within the required dates, stating the classes in which they wish to register if successful in their examinations. Necessary changes may be made later.

8. The fees payable upon application for registration are as follows:

(*a*) *Registration.* A registration fee of $10 must be paid once in each year, and an extra fee of $3 for late registration as provided in section 7 (*a*).

(*b*) *Tutorial.* The tutorial fee is $10 for each course and $5 for each half-course (indicated in departmental prescriptions by the letter *a* or *b* after the number). If the required amount of work in a course is not completed in the session, winter or summer, in which it is begun, the tutorial fee must be paid again, and the full work of the course sent in. See also section 22*b*.

(*c*) Pro Tanto. A student desiring to have courses credited on work done elsewhere must pay a *pro tanto* fee of $10 at the time of his first registration.

Minimum Residence Requirements

The University does not undertake to make it possible for a student to get a degree if he merely satisfies the minimum residence requirements given below, since in some subjects only a limited amount of instruction can be given extra-murally or in the Summer School. In the Sciences, for example, all the laboratory work must be done at the University and a student specializing in these subjects may find it necessary to spend two or three years in residence.. The various departmental prescriptions indicate the parts of work offered extra-murally. Candidates should examine these prescriptions in connection with the Regulations for Concentration.

9. Candidates for a degree must take at least nine courses in attendance at the University, either during regular Winter sessions or at the Summer School. Candidates for an Honour degree must attend during at least one regular winter session. In most cases an Honour Course will require much more than this minimum time. Examinations must be passed after each session's work.

10. Candidates for Specialists' certificates must attend at least two full sessions or, under the direction of the University, one full session and at least two sessions of the Summer School.

The Department of Education is willing to accept attendance of four years at the Summer School as covering attendance requirements for the Inspectors' Course.

Manner of Conducting Extra-mural Classes

(See also section 22)

11. The method of giving extra-mural instruction necessarily varies with the subject. Detailed information is contained in the instruction sheets provided from time to time. These specify the prescribed reading, assign exercises and essays to be written, and in some cases give the substance of intra-mural lectures. The first instalment of work is sent to the student as soon as he registers. The date of each essay or exercise coming in and of each criticism or fresh piece of work going out is recorded at the Registrar's Office. Each essay or exercise is promptly examined and returned to the writer with criticisms and suggestions.

Students should address their work and all enquiries regarding their work to The Director of Extension Courses, Queen's University, Kingston, Ontario.

Regularity of Work

12. All exercises must be sent in by the dates specified or they will be returned unmarked and without credit.

Transference from Extra-mural to Intra-mural Classes

13. Extra-mural students may become intra-mural students during the winter session at any time after December 1, *in those courses in which they have satisfactorily completed the work prescribed up to the date of their transferring.* Fees already paid will be applied on intra-mural charges.

14. Students who transfer to intra-mural work before January may add enough "b" half-courses to give them five classes in the second term, if such half-courses are available and the pre-requisite work has been done.

Library Facilities for Extra-mural Students

15. Extra-mural students are expected to buy all text-books prescribed. They should also make generous provision for the purchase of

other books bearing on their work, as the Library cannot undertake to provide enough duplicates to serve the needs of students not in residence.

16. Three books may be borrowed at one time, provided that no two relate to the same piece of work. Unless a secial arrangement is made, a book may be kept only two weeks from the date on which it is received.

17. Special arrangements are made for supplying the necessary books to extra-mural students in the Ph.D. Courses.

18. Extra-mural students must send to the Librarian a deposit of $2 for the use of one book at a time, $4 for two books, and $5 for three. Books may be exchanged as often as the borrower wishes; and when all are returned, the deposit, less the amount spent for postage, will be repaid on request. No fee is charged for the use of the Library.

19. All communications concerning books and deposits must be addressed to The Librarian, Queen's University, Kingston, Ontario.

Regulations Regarding Examinations

Intra-mural and extra-mural examinations are the same in all subjects and are held at the same time. It is impossible, therefore, to modify the examination schedule to suit the personal convenience of students.

The attention of students is called to GENERAL REGULATION 10.

20. Examinations are held in December, April, and September, as follows:—

(*a*) Examinations in all half-courses of the first term are held during the last week before hristmas. These examinations are final and may not be postponed till April or September.

(*b*) Examinations in all whole courses and in half-courses of the second term are held at the end of April. Examinations in Pass courses (numbered under 10) and in such Honour courses as may be offered in the summer, may be postponed till the autumn, but such postponement will lessen the amount of new work which may be completed in September.

(*c*) Ordinarily an extra-mural student may not write in September on more than two courses or three half courses. He may write on three course, however, if examinations in one or more have been postponed from April.

21. Applications for examination in the particular subjects upon which a student proposes to write, accompanied by the proper fees, must reach the Registrar's office by November 1 for the December examinations, by February 15 for the April examinations, and by July 15 for the Sep-

tember examinations. The fees are $3.00 for each half-course examination and $6.00 for each whole course examination, with an additional charge of $3.00 for late application, if accepted.

If the Registrar receives notice, at least ten days before the beginning of examinations, that a candidate will not write on a subject for which he has applied, the fee will be credited to him after the deduction of an administrative charge of two dollars.

22a. No student will be admitted to examination in any subject in which he has not fulfilled the requirements as to date of registration (see section 7a) and regularity of work (see section 12). Candidates are expected to send in all the essays and exercises at the dates specified, and the grade given on a particular course will be determined by the amount and quality of the work done. No candidate will be admitted to examination who has done less than eighty per cent. of the prescribed work. The last of the written work should reach the University at least two weeks before examinations begin.

22b. If in any session, summer or winter, a student does not complete the required work in a course, he must register again, pay all the fees and do all the exercises.

23a. A student who fails in course 1 or 2 in any subject (in course 1, 2 or 3 in the case of History) must pay the tutorial fee again and do all the work of the course before being admitted to examination in a subsequent year, but may write in September of the same year if at least thirty per cent. was made in April.

23b. Extra-mural students who make less than thirty per cent. in the examination on any other course must repeat the tutorial work in that course unless excused by the Director of Extension Courses acting on the advice of the Department concerned.

24. If a student who has completed the required work in a given subject wishes in some subsequent academic year merely to take the examination, he must pay the registration fee of $10.00 as well as the examination fee specified in Section 21. The registration fee is payable at the beginning of the session.

Students are warned that they postpone examinations at their own risk as no special papers will be set even if courses are discontinued or radically changed. If a candidate postpones an examination for two years, he must repeat the tutorial work unless excused by the Director of Extension Courses acting on the advice of the Department concerned

25. Extra-mural students in any of the modern languages will be required to take an hour a week of oral work with one of the regular classes during their intra-mural residence, and pass an examination on

such work. Students attending the Summer School will be given an opportunity of completing this oral work in the languages offered in the Summer School.

26. Students taking German, French or Spanish as a special subject must satisfy the Department concerned as to their oral qualifications. When an examination is necessary it must be taken at the University. Practical examinations in Science must be taken at the University.

27. Examination centres have been established at most of the larger cities and towns throughout Canada and a list of such centres is sent to all extra-mural students several months in advance of the examinations. Consideration will be given to an application to establish a new centre. Such application, accompanied by the special fee of $10, must be made by November 1 for December examinations, by February 15 for April examinations, and by July 15 for September examinations.

Determination of Standing

28. See sections 29 and 30 of GENERAL REGULATIONS beginning on page 65.

Fees for Extra-mural Students

29. A full statement regarding fees may be found under FEES.

30. Extra-mural students who enter as intra-mural students during the winter session will have their extra-mural fees applied on intra-mural charges. (See section 13.)

31. *In no case whatever will refunds be made.* In case of sickness, however, but under no other conditions, an application to have fees *carried over* will be considered if it is made within one month of registration and is accompanied by a doctor's certificate.

32. Cheques or drafts on any branch of the Bank of Montreal will be received at par. In other cases 15 cents per $100 should be added to cover bank charges. Remittances should be made by Post Office or Express Order, by cheque, or registered letter.

Text-books

33. Texts may be obtained from the Technical Supplies Department, Queen's University, and Messrs. Uglow & Co., Kingston.

	Summer School compulsory	Summer Extra-mural; Summer School optional	Summer Extra-mural only	Summer School and winter Extra-mural	Winter Extra-mural
Latin	32a, 45b	1, 2			1, 2, 40a, 51b
Greek	40a	A, 1	2		A, 1, 2, 35a, 46b
German		A, 1, 2			A, 1, 2, and some advanced courses
Spanish			A, 1		A, 1, 2, 6
French	35a	1, 2		10	1, 2
English	22a, 24b, 33b, 36b	1, 2			1, 2, 10a, 14b, 18, 20b, 22a, 24b
History	15b, 19b, 30a, 31b	1, 3	2		1, 2 3
Economics	4, 15a, 25a, 35b, 42a	1	2		1, 2, 4, 16a, 24b 63
Philosophy . . .		1, 2			1, 2, 10, 45
Mathematics . .	10a, 11b, 12a, 15a	1, 2	3a, 7b		1, 2, 3a, 7b, 10a, 11b
Physics	1, 2, 11, 12a				1, 2
Chemistry	1, 2, 21b, 35a				
Biology	1, 2, 11b, 12a, 16b, 31a				
Biblical Literature.					2

EXTRA-MURAL AND SUMMER SCHOOL WORK

On the preceding page a Table shows all the courses offered through Extra-mural and Summer School instruction in the summer of 1931 and the winter of 1931-32.

An explanation of this Table, together with the more important regulations, is given below in condensed form.

I. *Summer School Compulsory*

See Table under this heading. These courses are open only to those who attend the Summer School.

Registration required before April 10, with fee of $10 if not paid in previous autumn.

No extra-mural tuition fee, except in courses 1 and 2 of the Sciences, Physics 11, and Economics 4 ($10 for each course, payable on registration).

Preliminary work assigned on registration, but no extra-mural exercises except in courses 1 and 2 of the Sciences, and in Physics 11 and Economics 4.

Summer School attendance and work compulsory. Fee $35.25, payable July 3, or 4.

Examinations in September; or in December for first term work and in April for second term work. Fee $6 for each full course; $3 for each half course, payable before July 15 or on November 1 or February 15, according as examinations are written in September, December, or April.

II. *Summer Extra-Mural Only*

See Table under this heading. These courses are offered in the Summer only through Extra-mural work. They are not given in the Summer School.

Registration required before April 10, with fee of $10 if not paid in previous autumn.

Tuition fee of $10 for each full course and $5 for each half course, payable on registration.

Extra-mural work and exercises.

Examinations in September; fee $6 for each full course; $3 for each half course, payable before July 15.

III. *Summer Extra-Mural; Summer School Optional*

See Table under this heading. These courses are offered in the Summer by Extra-mural work alone, or by Extra-mural work up to July 3, and Summer School work thereafter.

Registration required before April 10; fee of $10 if not paid in the previous autumn.

Tuition fee of $10 for each course, payable on registration.

Extra-mural work and exercises.

Summer School work and exercises optional; if taken, the fee is $35.25. payable July 3, or 4.

Examinations in September; fee of $6 for each course, payable before July 15.

IV. *Summer School and Winter Extra-Mural*

See Table under this heading. These courses are partly covered in the Summer School; the rest of the work is done extra-murally in the winter.

Registration before April 10 with fee of $10 if not paid in previous autumn.

Tuition fee of $10 for each course, payable on registration.
Preliminary work assigned on registration but no summer extra-mural exercises.

Summer School attendance and work compulsory. Fee $35.25, payable July 3, or 4.

Winter extra-mural work in following winter; without additional fee if registration fee was paid in spring; otherwise, $10.

Examination in April. Fee $6 for each course, payable before February 15.

V. *Winter Extra-mural*

See Table under this heading. These courses are offered in the winter through extra-mural work. Laboratory work in the Sciences and oral work in the Languages must be done later at the University.

Registration required before September 10 with fee of $10 if not paid in previous spring.

Tuition fee of $10 for each full course and $5 for each half course, payable on registration.

Extra-mural work and exercises.

Examinations in December and April; fee $6 for each full course; $3 for each half course, payable before November 1 or February 15, according as examinations are written in December or April.

An extra-mural student may take four courses in a year with not more than two at any one time, summer or winter.

The registration fee of $10 is payable once in the year; tutorial fees in September or April when beginning each course.

THE SUMMER SCHOOL

The twenty-second session of the Summer School begins at 8 a.m. on Monday, July 6, 1931, and closes at 5 p.m. on Friday, August 21.

Students are expected to register on Friday, July 3rd, or Saturday, July 4th. An extra fee of $3 will be charged to those registering on Monday and an additional $1 for each day after that date if later registration is permitted.

Courses will be given in Latin, Greek, German, French, English, History, Philosophy, Economics, Mathematics, Physics, Chemistry, Biology. By reason of daily lectures and almost individual instruction, it is possible to cover about half the work done in the corresponding courses of the winter session.

The libraries and various laboratories are available for use as in the winter session.

Ban Righ Hall, the women's residence, will be open during the summer and will accommodate one hundred students. Applications for rooms should be sent as early as possible to the Dean of Women.

Purpose of the Summer School

The Summer School offers University advantages to those who cannot attend the classes of the regular session.

It gives TEACHERS an opportunity to improve their scholarship in particular lines of study, to observe methods of teaching, and to become acquainted with books and equipment not ordinarily available.

It gives INTRA-MURAL students who have lost standing through illness or other causes an opportunity of qualifying for the September Supplemental examinations. Moreover, intra-mural students in their first or second years, who are unable to carry the required five courses, may, with the consent of the Board of Studies, take three or four courses in the winter and the rest extra-murally in the summer, provided that they attend the Summer School.

It gives EXTRA-MURAL students an opportunity to take the oral work required in the modern languages, to do in the laboratories the practical work required in the Science courses, and to satisfy by attendance at five sessions the minimum residence requirements for the degree of B.A. (See sections 9 and 10 under REGULATIONS REGARDING EXTRA-MURAL

WORK). Two sessions of the Summer School are accepted by the Department of Education as equivalent to one of the two winter sessions required for Specialists' Certificates.

Admission

No examination is required for admission to the Summer School. The classes are open to all who desire to improve their scholarship or professional equipment. Candidates for a degree, however, must satisfy matriculation requirements before being admitted to the University work and examinations, and must register for summer work in April.

No student working for credit is allowed to register for more than two courses or three half-courses in the Summer School.

Examinations

No examinations are held in connection with the Summer School. Students desiring credit for their work should write at the regular University examinations in September. See sections 12, 20, and 22 under REGULATIONS REGARDING EXTRA-MURAL WORK.

Fees

See FEES, page 53.

Further Information

The Announcement of the Summer School, containing full details concerning the work offered, is published each year in March, and is supplied on application.

All inquiries concerning the Summer School should be addressed to The Registrar, Queen's University, Kingston, Ontario.

FEES

Cheques tendered in payment of fees should be certified by the banks upon which they are drawn.

INTRA-MURAL

The fees specified under the first three heads are payable each year upon registration.

Tuition (including class fees, registration, December and April examinations and laboratory fees of course 1 in the sciences) .. $70 00

Laboratory:

Fees for all Science courses beyond course 1:

Each whole course	5 00
Each half course	3 00

Deposit for all courses in Science (unused portion will be refunded at close of session):

Without Chemistry	5 00
With one course in Chemistry	10 00
With two or more courses in Chemistry	20 00

Student interests:

Men	22 00
Women	18 00

(Health Insurance, $4; Athletics, $5; special fee for Athletics to apply on new Gymnasium, $7 (including admission to all home games except play-offs); Arts Society, $3; Levana Society, $2; Students' Union, $3).

The fees specified below are payable as they are incurred.

Special Charges:

Pro tanto allowance of courses on work done elsewhere	10 00
Late registration (see also note, page 5)	3 00
Change of courses after registration	2 00
Preparatory courses in French and Latin, each	5 00
Special fee for students in Commerce, third and fourth years	15 00
Late application—for examination or graduation	3 00
Special examinations given at the University when a regular examination is missed:	
One examination	5 00
Two or more examinations	10 00
Examinations at outside centres:	
Each whole course	6 00
Each half course	3 00

Supplemental examinations:
Each whole course 6 00
Each half course 3 00

Special students not paying full fees:
Each course taken 25 00
(Student interests and Laboratory charges as above)

Graduation:
Bachelor of Arts (in Course) 10 00
Bachelor of Arts *ad eundem gradum* 20 00
Bachelor of Commerce 10 00
Master of Arts 20 00
Doctor of Philosophy 50 00
Doctor of Science 50 00
Extra Fee for degree *in absentia* 10 00

EXTRA-MURAL

The fees specified under the first two heads are payable upon registration; the examination fees are payable at the dates given in section 21 *of* REGULATIONS REGARDING EXTRA-MURAL WORK.

Registration:
Regular fee (covering twelve months) $10 00
Late registration 3 00
Change of work after registration 2 00
Pro tanto allowance of courses on work done elsewhere.. 10 00

Tutorial:
Each course 10 00
Each half-course 5 00

Examination:
Each whole course, April or September 6 00
Each half-course, December, April, or September 3 00
Establishing new centre 10 00
Late application 3 00

Graduation:
The same fees are charged as in the case of intra-mural students.

SUMMER SCHOOL

Full Summer School attendance (all students) $30 00
Athletics 3 00
Summer School Association 2 25
Laboratory deposit as required of other intra-mural students.

SCHOLARSHIPS, PRIZES, AND MEDALS

I—MATRICULATION SCHOLARSHIPS

For a list of Matriculation Scholarships and the conditions of award see the publication entitled REQUIREMENTS FOR MATRICULATION.

II—SCHOLARSHIPS IN ARTS

The Andrew Haydon Scholarship in Colonial History

Value $50. Founded by Senator Andrew Haydon, M.A., '93, LL.B. Awarded on the results of the sessional examinations in the Pass class in Colonial History (History 3). Not to be held by any student unless in residence in the session following the award.

The W. M. O. Lochhead Scholarship in Economics

Value $50. Founded by W. M. O. Lochhead, M.A., '98, Kitchener, Ont. The Scholarship will be awarded to the student taking the highest standing in the sessional examinations and classwork in Economics 1, provided he is in attendance in some faculty of the University in the following session.

The Adam Shortt Scholarship in Political Science

Value $50. Founded by G. W. Mason, Esq., K.C., in honour of Dr. Adam Shortt, formerly Professor of Economics. Awarded to the student taking the highest standing in Economics 2, provided he is in attendance in the following session and is registered in advanced work in the Department of Political and Economic Science.

The P. D. Ross Scholarship in Commerce

Value $150. Founded by P. D. Ross, LL.D., Ottawa. Awarded on the basis of the third year's work in the Commerce Courses, provided that the candidate is taking at least four full courses or their equivalent in the "Special Subjects" in Commerce and Administration and lacks not more than five other courses for graduation in Commerce. Tenable during the student's fourth year, if it is taken intra-murally.

The Sir Wilfrid Laurier Memorial Scholarship

Value $100. Founded by the Ontario Women's Liberal Association for proficiency in French conversation: awarded only to a Canadian-born English-speaking student, a son or daughter of a British subject by birth or naturalization, not of French parentage, to perpetuate the memory of Sir Wilfrid Laurier.

Alexander Laird Scholarship in English 1

Value $50. Founded in memory of the late Rev. Alexander Laird by his brothers and sisters and awarded annually to the student who makes the highest marks in English 1. Tenable only by a student in residence in the session following the award.

The Ann Eliza Stafford Scholarship in Biology

Value $40. Founded by T. T. Bower, Esq., Toronto. Awarded to a graduate with first class Honours in Biology who is competent to undertake research work in Physiology. The holder must be willing to devote himself exclusively to research and must carry on his investigations in the University laboratories for at least one year from the date of his appointment.

The Maclennan Scholarship in Greek

Value $25. Given by the late Hon. Jas. Maclennan, LL.D., Toronto, to encourage the study of Greek in the University. Awarded on the results of the April examinations in Greek 2 to the best student who is proceeding to the Honour course in Greek. Not to be held by any student unless in actual attendance, and not necessarily to be awarded unless a sufficient degree of merit is shown.

The N. F. Dupuis Scholarship in Mathematics

Value $60. This is one of three scholarships founded by the graduates of the University in honour of the late Professor N. F. Dupuis on the completion of his forty-five years' service as Professor in the University. The scholarship is awarded to the student who takes the highest standing in Mathematics 1 in the April examinations. Tenable only by a student in residence in the session following the award.

The William Moffat Scholarship

Value $50. Founded by Dr. William Moffat of Utica and awarded annually to the student making the highest standing in first year Chemistry. The award will be made on the combined results of class work and examination, and students in both Arts and Science are eligible. Tenable only by a student in residence in the session following the award.

Robert Bruce Scholarships

Under provisions of the will of the late Robert Bruce of Quebec the University has established a Scholarship worth about $75 in each of the Faculties of Arts, Applied Science and Medicine. Until 1948 the award is limited to students of Scottish extraction.

The Scholarship in each Faculty will be awarded at the end of the first year to the student who has made the highest standing on the

regular examinations of that year. One-third of the value of each Scholarship will be paid to the winner in each of the second, third, and fourth years of his Course provided that he is in attendance in the Faculty in which the award was made.

Jarvis Scholarships

For students from Glebe Collegiate Institute, Ottawa.

Two Scholarships of the value of $25 each, the gift of A. H. Jarvis, Esq., of Ottawa, will be awarded under the following conditions: These Scholarships are open only to former students of the Glebe Collegiate Institute, Ottawa, who without some such assistance may not be able to carry on their academic courses. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Scholarships may be awarded to men or to women. A Scholarship may be held in successive years by the same student and also in conjunction with any other Scholarship awarded by the University.

The Scholarships shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the Principal of the University, the Principal of Ottawa Collegiate Institute and the donor. Candidates shall make application for the same not later than May 15th.

Dr. S. J. Keyes Memorial Scholarship

Value $100. Given by Mrs. Mildred E. Keyes of Ottawa in memory of her husband, Dr. S. J. Keyes. Open to graduates of the Ottawa Normal School who have completed by extra-mural or extra-mural and Summer School work four courses selected from courses 1 and 2 in the various subjects; tenable by a student in attendance for the first time at a regular session of the University. Application should be made to the Registrar by November 1 in each year.

Arts '15 Scholarships

(The capital sum is not yet fully collected)

Present value $33. Founded as a memorial by the class of 1915. Awarded annually in turn by the Departments of English, Mathematics, and History to the student with highest standing in two Honour courses taken in the third year. Tenable by a student in residence in the following year. Awarded in Mathematics in 1930, in History in 1931, in English 1932.

McIver Scholarship

Value $250. Founded by J. B. McIver, former Treasurer of Queen's University. Awarded to the student standing highest in certain classes. The award in 1931 will be made under conditions to be announced at the beginning of the session. Tenable only by a student in residence the following session.

Welch Scholarship

Value $125. Founded by Frederick Welch of Kingston. Awarded in the Faculty of Arts and open for competition only to the sons and daughters of non-commissioned officers and men who have served overseas in the late war, and of mechanics and labourers, which students shall at the time be bona fide residents of the City of Kingston; preference being had for the children of soldiers. Application for this Scholarship must be made to the Registrar not later than March 15 and must give evidence of eligibility in accordance with the terms of the will. The Scholarship will be awarded on the basis of the April examinations and will be tenable by a student in residence next session.

McLeod and McLean Scholarships

Founded by Jane McLeod. Two scholarships of $42.00 each. Awarded each year to the two most promising and deserving students entering any Faculty of Queen's University from the Kingston Collegiate Institute.

III—SPECIAL SCHOLARSHIPS

A.—The Rhodes Scholarship

1. *General Regulations*:—A Rhodes Scholarship is tenable at the University of Oxford and may be held for two years. Appointments are made for two years in the first instance, and a Rhodes Scholar who may wish to remain for a third year will be expected to present a definite plan of study for that period satisfactory to his College and to the Rhodes Trustees.

Rhodes Scholars may be allowed, if the conditions are approved by their own College and by the Oxford Secretary to the Rhodes Trustees, either to postpone their third year, returning to Oxford for it after a period of work in their own countries, or may spend their third year in post-graduate work at any university of Great Britain, and in special cases at any university on the continent of Europe, the overseas dominions, or in the United States, but not in the country of their origin.

The stipend of a Rhodes Scholar is fixed at £400 per year. At most Colleges, and for most men, this sum is not sufficient to meet a Rhodes Scholar's necessary expenses for Term-time and Vacations, and Scholars who can afford to supplement it by say £50 per year from their own resources will find it advantageous to do so.

The Rhodes Scholarship is open equally to students in all faculties. A candidate to be eligible must:

1. Be a British subject, with at least five years' domicile in Canada, and unmarried. He must have passed his nineteenth year, but not have passed his twenty-fifth birthday on October 1st of the year *for* which he elected;

2. Have reached such a stage in his course at one of the Universities in Canada that he will have completed at least two years at the university in question by October 1st of the year *for* which he is elected.

Candidates may apply either for the province in which they have their ordinary private domicile, home or residence, or for any province in which they have received at least two years of their college education before applying. Full particulars can be obtained from D. R. Mitchener, Esq., 372 Bay Street, Toronto 2, Ontario, Secretary of the Selection Committee for the province of Ontario.

(*Special for Quebec and Ontario*) Two Scholarships may be awarded annually in the province of Quebec if qualified candidates appear.

Two Scholarships may be awarded annually in the province of Ontario if qualified candidates appear.

Each candidate for a Scholarship is required to make application to the Secretary of the Committee of Selection of the province in which he wishes to compete *not later than October 31st.* Application forms may be obtained from the Registrar, Queen's University.

Method of Selection

In accordance with the wish of Mr. Rhodes, the Trustees desire that in the election of a student to a Scholarship, regard shall be had to (1) his literary and scholastic attainment, (2) his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship, (3) his exhibition during school-days of moral force of character and of instincts to lead and take an interest in his schoolmates, and (4) physical vigour, as shown by interest in outdoor sports or in other ways.

Where circumstances render it impracticable to carry out the letter of these suggestions, the Trustees hope that every effort will be made to give effect to their spirit, but desire it to be understood that the final decision must rest with the Committee of Selection.

The following graduates of Queen's University have been awarded Rhodes Scholarships:

J. M. Macdonnell, M.A., 1905.
A. G. Cameron, B.A., 1906.
Norman S. Macdonnell, M.A., 1907.
Stanley Scott, B.A., 1911.
H. S. Smith, M.A., 1912.
A. G. Cumming, M.A., 1914
H. R. MacCallum, B.A., 1919.
K. E. Taylor, B.A., 1920.
A. D. Winspear, B.A, 1922
L. F. Kindle, B.A., 1925.
D. A. Skelton, B.A., 1926.

B.—The Science Research Scholarship

This postgraduate scholarship of the annual value of £250 was founded by Her Majesty's Commissioners for the Exhibition of 1851, and is awarded to students who have given evidence of capacity for original research, and, except in very special circumstances, are under 26 years of age.

A given number of Scholarships are awarded annually to students in Canada recommended by the Universities approved by the Commission.

The nominee must be a British subject, must have been a *bona fide* student of Science for three years, must have been a student of this University for a full year immediately before his nomination, must be a student of this University at the time of his nomination (or he must have been a student at this University for a full year ending within twelve months prior to his nomination and since ceasing to be such student must have been engaged solely in scientific study), and must pledge himself not to hold any position of emolument while holding the scholarship without special permission from the Commissioners. He is recommended to the Commissioners by the Senate of the University. The scholarship may be held for two years, if the report of the first year's work be satisfactory to the Commissioners, and in exceptional cases for a third year. In the absence of special circumstances, the scholar will not be permitted to conduct his investigations in the country in which he received his scientific education. The particular investigation the student proposes to pursue must be stated before a scholarship can be awarded.

The scholarship is payable quarterly in advance and a grant of £25 will be paid if a satisfactory final report is presented within three

months of the expiration of the scholarship. If in the opinion of the Commissioners it is necessary a scholar will receive an additional annual allowance not exceeding £30, and in some cases the fare from his University will be partially paid.

Recommendations must be received at the office of the Commissioners on or before June 1.

The following Science Research scholars have been appointed from Queen's University:

Norman R. Carmichael, M.A., 1894.
Thomas L. Walker, M.A., 1896.
Frederick J. Pope, M.A., 1898.
W. C. Baker, M.A., 1900.
C. W. Dickson, M.A., 1901.
C. W. Knight, B.Sc., 1904.
F. H. McDougall, M.A., B.Sc., 1905.
Campbell Laidlaw, B.A., M.D., 1907.
N. L. Bowen, M.A., B.Sc., 1909.
Walter A. Bell, B.Sc., 1911.
John R. Tuttle, M.A., 1913.
Robert C. Cantelo, B.Sc., 1915.
Douglas G. H. Wright, B.Sc., 1921.
R. H. F. Manske, M.Sc., 1924.
Donald C. Rose, M.Sc., 1924.
H. M. Cave, M.A., 1926.
B. W. Sargent, M.A., 1928.

C.—Arts Research Fellowships

The University has established two Fellowships of the value of $500 and two of the value of $250, open to men and women who have taken an Honour B.A. at Queen's or an equivalent degree elsewhere. At the discretion of the Committee on Arts Research one of the $500 Fellowships may be awarded as a Travelling Fellowship, but with this exception the appointments are given only to those undertaking graduate studies at Queen's.

A student appointed to a Travelling Fellowship must submit and have approved a plan of study, and must present a report on his year's work within twelve months of his appointment.

A student appointed to a Fellowship within Queen's may be required by the Committee in consultation with the Department concerned, to undertake work of any of the following kinds: (a) Independent investigation, (b) Assistance in research work carried on by the Department, (c) Tutorial assistance not to exceed six hours a week.

The holder of a Fellowship may be required to report in lectures or in written form the results of any investigations carried on.

The holder of a Fellowship shall not be permitted to do any tutorial work except such as may be required of him by the Department in which his special studies lie. In no case shall tutorial work exceed six hours a week or entitle the Fellow to additional remuneration.

Applications must be sent to the Registrar, accompanied by evidence of eligibility, not later than April 1 of each year.

The Fellowships will be awarded only to candidates of distinction and promise.

D.—The Sir James Aikins Fellowship in Canadian History

This Fellowship of the annual value of $250, was created through the generosity of Sir James Aikins, K.C., LL.D., of Winnipeg. It will be awarded to the student obtaining the highest standing in the Honour courses in Canadian History, namely, History 20, 21b, 30a, 31b, or such other courses as the Professor of Colonial and Canadian History shall determine.

The University will supplement this Fellowship by an amount which will bring the total sum to $500. The Fellowship will be tenable only by students who return to the University for further work in Canadian History and will be subject to the conditions regarding tutorial work applicable to the Arts Research Fellowships.

E.—Scholarship of the Canadian Federation of University Women

The scholarship of the Canadian Federation of University Women, value $1,250, available for study or research work, is open to any woman holding a degree from a Canadian University. In general, preference will be given to those candidates who have completed at least one or two years of graduate study and have a definite research in preparation. The award is based on evidence of character and ability of the candidate and promise of success in the subject to which she is devoting herself.

For all information address the Convener of the Scholarship Committee, Dr. Geneva Misener, University of Alberta, Edmonton, Alberta. Applications must be received not later than February 1st.

F.—Daughters of the Empire Post-graduate Scholarship (Overseas)

As part of their War Memorial the Imperial Order Daughters of the Empire offers in each province in Canada a scholarship for postgraduate study in Britain. The scholarship, of the value of $1,600, is tenable for one year.

These scholarships are subject to the following conditions:

(1) Candidates may be men or women. They must be British subjects, with at least five years' residence in Canada, and unmarried. Except in the case of a returned soldier, sailor or airman, they must have passed their 19th but not their 27th birthday in October of the year in which they begin their work in Britain. In the case of a returned man the age limit is higher. Each candidate must either hold a degree from a University or College in the province in which he or she is making application, or be in his or her final year in a course proceeding to a degree.

(2) In each province a Committee of Selection will award the scholarship. Other things being equal, preference will be given to a returned man, his sister, son or daughter. The Committee will consider not only the academic record of the candidate, but his or her character, physical fitness, and promise.

(3) Applications for this scholarship should be sent, before October 6th, to the Provincial I.O.D.E. Educational Secretary, Y.W.C.A. Building, Main Street, Hamilton, Ontario, who will provide additional information about the scholarships.

The following graduates of Queen's University have been awarded Daughters of the Empire Overseas Scholarships:

Watson Kirkconnell, M.A., for the year 1921-1922.

Hartley Munro Thomas, B.A., for the year 1923-1924.

G.—The Milton Hersey Fellowship in Chemistry

This Fellowship of the annual value of $500, has been endowed by Milton L. Hersey, M.Sc., LL.D., of Montreal. It is open to graduates of all universities and technical colleges.

The holder of this Fellowship shall carry on research work for the whole session and embody the results in a thesis. The research may take the form either of independent investigation or of assistance in an investigation carried on by some department. The Fellow may be required to undertake tutorial work not to exceed six hours a week.

Applications for Fellowships will be received by the Registrar up to May 1. If no appointment is made by that date, further applications will be received up to September 2.

IV—PRIZES

In submitting literary articles or essays, candidates for prizes must observe the following regulations:

1. Competitive papers must be given to the Registrar not later than April 1.

2. Each paper is to bear a motto instead of the author's name, and must have attached to it a sealed envelope, bearing the same motto and containing a written declaration over the author's signature, to the effect that it is his unaided composition.

3. The envelope attached to successful papers shall be opened and the writer's name made known at the Convocation at the close of the session.

4. Prizes will be awarded only to those productions which the examiners consider to be of sufficient merit.

5. All successful productions shall be the property of the University, and shall be at the disposal of the Senate.

Curtis Memorial Foundation

Value about $70. Founded in memory of the late J. T. Curtis of Ottawa. Awarded in October to a graduate of that year (April or September), who has completed the degree Course by extra-mural and Summer School work. The award is made by a special committee on the basis of scholastic ability, interest in athletics, and service to the Summer School.

Gowan Foundation No. I

Value $25. Established by the late Sir James R. Gowan, K.C.M.G. Awarded for the best essay written under examination conditions in February of each year, on one of a list of subjects prescribed by the Department of Political and Economic Science.

Gowan Foundation No. II

Value $25. Given by the late Sir James R. Gowan, K.C.M.G., for the best collection of Canadian Ferns and Fern Allies. The plants must be good specimens, well pressed and mounted on herbarium sheets of the standard size. The collection must be delivered before December 15.

Gowan Foundation No. III

Value $25 in books. Established by the late Sir James R. Gowan, K.C.M.G. Awarded in Honours in Political Science.

Latin and Greek Composition Prizes

Two prizes, each of the value of $10 in books, are offered for competition for the best composition in Latin and Greek respectively. The subject for the Latin Prose in session 1930-31 will be Mommsen, *History of Rome*, Book V, chapter X, the last paragraph beginning, "The constitutional struggle," down to "equally dangerous and impracticable."

Greek Prose, Grote: *History of Greece*, chapter LXIII, pages 370-373: "The eighth year of the war . . . there can be little doubt that they would have acted with equal rigour."

Special Prize in German

A prize of the value of $10 in books is awarded to the student obtaining the highest standing in German 2.

Special Prize in French

A prize of the value of $10 in books is awarded to the student obtaining the highest standing in French 2.

McIlquham Foundation in English

Value $27.50. Established by the parents of Mr. J. Max McIlquham, a student at Queen's University, 1912-15, who was killed on service overseas. Awarded for the best original poem, short story, or play, as the Department of English may decide from year to year. For 1931-32 the prize will be awarded for any one of the three.

James C. Rogers Prize in English

A prize of the value of $5 in books. Awarded by James C. Rogers, B.A., '94, to the student obtaining the highest standing in English 2.

Special Prize in Spanish

A prize of the value of $10 in books is awarded to the student obtaining the highest standing in Spanish 1.

Mary Fraser McLennan Prize in Hebrew

A prize of the value of $12, founded in memory of Mary Fraser McLennan, of Lancaster, by her sons. Awarded to the student obtaining the highest standing in Hebrew 1, provided he intends to pursue a Theological Course in Queen's Theological College.

The M. C. Cameron Prize in Gaelic

Value $40. Founded by the late M. C. Cameron, M.P., Goderich. Awarded to the best Gaelic scholar, reader, and speaker. Application for examination should be submitted to the Registrar before January 15 in each year. Work prescribed: any 600 lines of Ossian's *Fingal*, or an equivalent amount of any other Gaelic literature selected by the candidate; Blackie's *Language and Literature of the Scottish Highlands*, Gaelic Grammar, translation at sight of Gaelic into English and English into Gaelic. This scholarship will not be awarded to any candidate who does not take at least fifty per cent. of the total number of marks in the examination.

Special Prize in Greek A

Two prizes of the value of $100 and $50 will be awarded to the two students making the highest marks in the examination in Greek A.

Robert Bruce Bursaries

The will of the late Robert Bruce of Quebec provided for a sum of about $100 a year to be given in Bursaries "to students of promising ability but straitened circumstances." Until 1948 the award is limited to students of Scottish extraction.

This sum will be disbursed annually to one or more students in the third or later years in any Faculty. The Registrar will receive applications up to December 21 in each year.

V.—MEDALS

A medal is awarded by the University under the conditions stated below to the candidate who makes the highest standing in Honours in each subject, provided such standing is not less than 75 per cent.

1. A graduate in Arts or a Tutor engaged in teaching the Honour work of a competitive subject is not elibigle for a medal.

2. A candidate for a medal must have completed at least six courses in the competitive subject, of which two full courses must be taken in the session at the end of which the medal is awarded.

3. The award is made on the basis of the candidate's standing in four Honour courses following course 2.

GENERAL REGULATIONS

All enquiries regarding regulations should be addressed to the Registrar.

Changes in regulations become effective immediately.

SPECIAL STUDENTS

1. Special students are those who do not intend to proceed to a degree. Such students may be admitted on satisfying the Faculty as to their ability to profit by the courses to which they seek admission.

2. Special students under twenty-one at the opening of the session are subject to all the regulations affecting regular students and to the following special regulations:—

(i) They shall not be granted admission for more than one session, though they may be readmitted to a succeeding session on a new application.

(ii) They shall not be allowed any supplemental examination but must withdraw from the University immediately if they fail to satisfy the Faculty at the regular December or April examinations.

(iii) Examinations passed by special students shall carry no credit towards Matriculation or towards a degree.

(iv) Attendance as a special student will not count as part of the attendance required for a degree.

3. Special students over twenty-one years of age at the opening of the session may by action of the Faculty be exempted from all regulations respecting attendance and work.

REGULATIONS REGARDING COURSES

In addition to the regulations below, see those under "Courses of Study leading to the Degree of B.A." Note particularly the provisions for Concentration, Distribution, and Sequence of Work.

Attendance and Work

4. Students are expected to be present at all lectures and laboratory periods and to hand in all essays and exercises when due. No one whose attendance or work falls below 80% of the total, whether on account of late registration, illness, or any other cause, will ordinarily be admitted to the final examinations in either December or April.

A careful record of absences based on monthly reports from Instructors in kept at the Dean's Office.

5. The December and April marks will be determined not merely by the results of examinations but also by the work of the whole term or session, including consideration of class tests, examinations, attendance, and progress.

6. The faculty may at any time either during the term or after the close of the term require any student to withdraw from the University whose conduct, attendance, work, or progress is deemed unsatisfactory.

Penalty for Failures and Low Grades

7. A student who has failed to pass the examination in any course must repeat the attendance and examination in that course in his next year at the University if he intends counting it towards a degree. If he should happen to register as an extra-mural student he must take this course and repeat the full work of the session.

8. A student who passes in only two whole courses or fewer out of four or five attempted in the final examinations will be considered to have failed in his year. Failure in the year will be determined by the results of the final examinations in December and April. A student who fails in his year will not have the privilege of the fall supplemental examinations.

9. Any student who twice in his Course fails in a year's work will be asked to withdraw from the University.

10. A student who fails in his year will retain credit only in those subjects in which he has obtained at least second division.

11. A student who makes less than 30% on a subject in the final examination in December or April will not be permitted to write on the fall supplemental examination in that subject unless he takes it again in the Summer School.

12. Students whose standing for the first term is regarded as unsatisfactory will be asked to discontinue their Course for the rest of the year.

Number of Courses in a Year

13. No student is allowed to take more than five courses in the academic year. See, however, section 9 under Admission to the Faculty of Arts.

14. An intra-mural student, unless excused for some special reason, must take five courses in each of his first and second years. In no case will such a student be allowed to take fewer than three courses in his first or second year. In exceptional circumstances, he may, however, with the consent of the Board of Studies, take three or four courses in the winter session and the rest extra-murally in the summer, provided that he attends the Summer School.

15. Any student who without special permission drops a course in which he is registered will be regarded as having failed in that course.

Preparatory Courses

16. Students with full matriculation who desire to begin work in Greek, German, or Spanish may count course A in one of these subjects toward a degree. Such students may also count course A in one of these subjects toward the required number of courses for Honour standing, provided that at least five other courses are taken in the same subject. A student wishing to take Honours in one of the above subjects will be permitted to take course 1 during the summer after taking course A in the winter, but in that case he cannot count course A as a course towards his degree.

Courses A and 1 may not be substituted for courses 1 and 2 where the latter are definitely prescribed.

17. In no case may Latin A, French A, or Mathematics A be counted towards a degree or be given any credit at the University. Such instruction as may be provided, summer or winter, in one or more of these classes is merely for the purpose of assisting candidates to prepare for the regular matriculation examinations. See Admission to the Faculty of Arts, Sections 13 and 14.

REGULATIONS REGARDING EXAMINATIONS

(See also Regulations 5 to 12)

Mid-Term Examinations

18. In every class numbered A, 1, 2, and in History 1, 2, and 3, there will be an hour examination arranged by schedule at the regular class hour about four weeks after the opening of the session.

19. Other hour examinations in the regular class hour may be held by any instructor whenever he thinks it advisable.

December Examinations

20. Mid-session examinations are held in all subjects, including courses for private work, during the last week before the Christmas holidays. Such examinations are final in half-courses of the first term. In courses that continue throughout the session credit not exceeding fifty per cent. of the final marks may be assigned to the work of the first term. Any student not writing on any mid-year examination is regarded as having failed and will be given a mark of zero.

The attention of students is specially called to Regulations 5 and 8.

April Examinations

21. Final examinations are held in April. Intra-mural students must take these examinations in all the courses and half-courses in which they are registered in the second term. Permission to postpone until September examinations in courses numbered under 10 may be obtained in special cases but only upon the recommendation of the Profesors concerned. Honour examinations may not be postponed. Examination Time-tables are issued each year in March.

The attention of students is specially called to Regulations 5, 8 and 10.

September Examinations

22. Supplemental examinations are held in September in all courses numbered under 10 and in such Honour courses as may be offered in the summer. Other supplemental Honour examinations may be given in September with the consent of the Board of Studies, if recommended by the Departments concerned.

23. No student is permitted to take a Supplemental examination in any course or half-course in which he had made less than thirty per cent. at the previous examination.

24. At the specified date (see pages 5 and 6) before the September examinations begin, each candidate must apply to the Registrar for permission to write on the subjects in which he desires to be examined. The application should be on printed forms supplied for the purpose and should be accompanied by the proper fees. See FEES.

Special Examinations

25. Students who for any reason fail to take an examination on the appointed date may be required to take a special examination. The fee is five dollars for one pecial examination or ten dollars for two or more special examinations.

Admission to Examinations

(See also Regulations 4, 21, 22)

26. Students will not be permitted to write on examinations unless they have registered at the prescribed date within the academic year in which they present themselves. (See REGISTRATION.) But graduates not in attendance who wish to take examinations merely to raise their standing in subjects pased may delay their registration till March 1.

27. No candidate will be admitted to the examination hall later than thirty minutes after the beginning of the examination.

28. No candidate will be permitted to take any books or papers into the examination hall except by express direction of the examiner.

Determination of Standing

29. In determining a student's standing at a sessional examination the Departments will take into account the entire class record. See Regulation 4.

30. The following percentages are required for the various grades of Pass and Honour standing in all courses:

PASS STANDING

(Applying only to courses numbered under 10)

Division I .....75 per cent. and over.
Division II .....62-74 per cent.
Division III .....50-61 per cent.

HONOUR STANDING

(Applying to all courses numbered 10 or over)

Class I .....75 per cent. and over.
Class II .....66 to 74 per cent.
Class III .....55-65 per cent.
Credit on a Pass Course .....50-54 per cent.

COURSES OF STUDY LEADING TO THE DEGREE OF B.A.

GENERAL EXPLANATIONS

Pass and Honour Courses

The word "Course," when printed with an initial capital, is used to indicate a programme of work leading to a degree or certificate.

A candidate for the degree of Bachelor of Arts may take a Pass Course or an Honour Course. The latter requires greater specialization and higher standards in the work of the two main subjects. Details are given below under REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

Courses and Half-Courses

The word "course," printed with an initial small letter, indicates a unit of work occupying, as a rule, three hours a week throughout the session. A "half-course," on the other hand, usually occupies only one term, though occasionally it may run through the session.

Two half-courses are equivalent to a course, and when the amount of work to be done is defined in courses, it is to be understood that an equivalent in courses and half-courses may be offered.

Numbering of Courses and Half-Courses

Preparatory courses in the languages are designated by the letter A. See GENERAL REGULATIONS. Other courses are numbered with Arabic numerals (Latin 1, Greek 2). Half-courses have in addition to the numeral the letter *a* or *b*, according as they are offered in the first or second term. A half-course running throughout the session is marked *hf*.. (Chemistry 133hf.)

Courses numbered 99 are Reading and Seminar Courses for candidates for the degree of B.A. with Honours. They may not be counted towards a Pass degree or towards the degree of M.A. See Section 2 under REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

The fundamental courses in each subject are numbered 1 and 2 (History 1, 2 or 3) and must be taken by all proceeding to advanced work. Other courses numbered under 10 are for Pass students only. Courses numbered 10 and upward are Honour courses, though in most departments some of them are open to Pass students.

SYNOPSIS OF COURSES

The following Courses of Study are outlined in the succeeding pages:

Pass and Honour Courses leading to the degree of B.A.

Course for Teachers' Certificates in the Province of Ontario.

Courses in Commerce and Administration.

Combined Course in Arts and Applied Science.

Combined Course in Arts and Theology.

A candidate is subject to changes in Registration or Courses made after his first registration unless in the judgment of the Board of Studies undue hardship is involved.

All enquiries regarding Regulations should be addressed to the Registrar.

REQUIREMENT FOR A PASS B.A. DEGREE

Students who began a Course before 1930 may complete it under regulations given below or under those of the year in which they entered.

A candidate for a Pass degree must pass twenty classes, chosen in accordance with the three regulations given below, and must make a standing of second division or over in at least ten.

A. The twenty classes offered for a degree must include the following nine:

English 1, English 2,

Latin 1

Any *two* chosen from Greek 1, German 1, French 1, Latin 2, Greek 2, German 2, French 2,

Either Philosophy 1 or Greek and Roman Civilization,

Any *one* chosen from History 1, History 2, History 3, Economics 1, Economics 2,

Mathematics 1,

Any *one* chosen from Physics 1, Chemistry 1, Biology 1, Biology 2, Geology 1, Mineralogy 1.

B. A candidate must so arrange his work as to include at least three classes in each of three subjects.

C. Additional classes to make a total of twenty may be freely chosen, subject to the regulations regarding prerequisites, from those listed under the heading "Details of Courses of Instruction," pages 83 to 171.

HONOUR COURSES LEADING TO THE DEGREE OF BACHELOR OF ARTS

1. Amount and Quality of Work

Except with the permission of the Department concerned, a student may not register in a course numbered 10 *or over unless he has made at least sixty-two per cent. in the preceding course.*

A candidate for the Honour degree of B.A. is advised to spend five years from Matriculation. He must pass in twenty courses with a minimum of fifty per cent. in each general subject, and in the Honour work of each special subject must make a minimum of fifty-five per cent. in each course with an average of sixty-five per cent.

A student who fails in an Honour Course will be given a Pass degree, if he makes the minimum percentages mentioned above and satisfies the requirements for concentration and distribution of work in a Pass Course.

2. Concentration of Work

General Principles

Each candidate for Honours must take at least twelve courses in two related subjects of which all but the first two in each subject shall be Honour courses, that is, chosen from the group numbered upwards from 10 in the departmental announcemets. He must take at least five courses in each of his two special subjects and must include course 99 (Seminar and Reading course) in the subject chiefly emphasized, if this course is offered in the calendar prescription of work in that subject. Students in course 99 meet once a week for discussion, the remainder of the work being done by private reading. This course will not count towards a Pass degree or towards the Master's degree.

General Examinations

Candidates for an Honour Degree must at the end of their final year take in addition to the regular sessional examinations a general examination covering the whole field of work in their main subject. This examination is not merely a review of courses passed; it is in-

CORRECTION

On page 74 of the calendar for 1931-32 under "1. Amount and Quality of Work," paragraph beginning "A candidate for the Honour degree of B.A.," the correct requirement in the special subjects is a minimum of fifty-five per cent. in each course with an average of sixty-six per cent.

tended to test the candidate's knowledge of a subject. Periods or subjects not dealt with in the regular work must be covered by private study. The results of the general examination will be an important element in the determination of final standing.

Candidates who divide their Honour work equally between their special subjects may take the general examination in either subject.

SPECIAL REGULATION

C. *Pre-requisite courses.* When the Honour subjects belong to Group III (see the next section), and require two or three courses in other subjects as a pre-requisite (as Geology, Mineralogy, and Biology require Chemistry), they shall be reduced by the amount of work that must be taken beyond course one in the prerequisite studies.

In accordance with this regulation the University will award Honours on the completion of the following special Courses:

Specialist's Course in Science

Six general courses selected from Groups I and II according to the general regulations.

Fourteen courses from Group III, viz., Mathematics 1, 2; courses 1 and 2 and an honour course in each of Physics, Chemistry, and Biology; an additional honour course in one of Physics, Chemistry, Biology; Geology 1; Mineralogy 1.

Course in Chemistry, Geology, and Mineralogy

Six general courses selected from Groups I and II according to the general regulations.

Fourteen courses from Group III, viz., Mathematics 1; Physics 1; Chemistry 1, 2, 21,(35, 41, and two others; Geology 1 (62%), Mineralogy 1 (62%), Geology 10 and any other two courses numbered 10 or over in Geology or Mineralogy.

3. Distribution of Work on an Honour Course

A candidate for an Honour degree must distribute his work so as to include the courses indicated uder each of the following groups:

Group I LANGUAGE AND LITERATURE	*Group II* PHILOSOPHY, HISTORY, POLITICAL AND ECONOMIC SCIENCE	*Group III* MATHEMATICS AND SCIENCE
	Philosophy 1 *or* 2	*Mathematics* 1
English 1 *and* 2	One of	One of
[1]*Latin* 1 *and* 2	*Philosophy* 1	*Physics* 1
[3]One of	*Philosophy* 2	*Physics* 2
Greek 1 *and* 2	*History* 1	*Chemistry* 1
German 1 *and* 2	*History* 2	*Chemistry* 2
French 1 *and* 2	*History* 3	*Biology* 1
	Economics 1	*Biology* 2
	Economics 2	*Geology* 1
		[2]*Mineralogy*

Italian, Spanish, Scandinavian, and Biblical Language and Literature may be counted towards a degree as optional subjects, but of these four only Spanish may be taken as an Honour subject.

Spanish and Italian may not both be counted towards a degree, but with the consent of the Department of Spanish, students taking Honours in Spanish may substitute Italian 1 for one of their lecture courses in Spanish.

4. Sequence of Work

In each of his second, third, and fourth years a student must have his programme of work approved by the Board of Studies.

The courses in each subject must be taken in the order prescribed in the Departmental announcements. Ordinarily course 1 is pre-requisite to course 2 and course 2 is pre-requisite to all other courses, but slight variations from this order are permitted by the Departments of Hitory, Economics, Philosophy, Mathematics, and Biology.

First Year

A student entering with Pass Matriculation shall take the following five courses in his first year:

1. Latin 1 (But those choosing their Honour subjects from Group III must include a science instead of Latin 1. The latter may be taken later as an option.)

---

[1]A student whose Honour subjects are both in Group II may omit either Latin 2 or Mathematics 1; a student whose Honour subjects are both in Group III may omit Latin or take it as an optional subject, or substitute it for the second year work in Greek, German or French.

[2]Mineralogy may be taken only by students who have had matriculation Chemistry or Chemistry 1 or are taking Chemistry 1 concurrently.

[3]For graduate studies German and French are almost essential.

2. Greek 1, German 1, or French 1
3. English 1
4. Mathematics 1
5. A Science. (Those, however, who choose a third foreign language as one of the two Honour subjects must begin it at this point and postpone the science course).

Students will note that no course in Group II may be taken by a Pass Matriculant in his first year.

Students requiring for any purpose a certificate of having completed the first year's work must take the following five courses: (1) Latin 1; (2) Greek 1, German 1, French 1, or Spanish 1; (3) English 1; (4) Mathematics 1; (5) Physics 1 or Chemistry 1, or another of the courses named in (2).

Students without matriculation in Latin, French, or Mathematics must pass the regular matriculation examinations before being admitted to course 1 in these subjects.

Second Year

A student in his second year shall take five courses; he shall continue at least two subjects of his first year and include at least one subject from Group II.

Third and Fourth Years

An Honour student intending to graduate in four years must in his third and fourth years take the remaining courses of his Honour subjects and such additional prescribed or optional work as may be necessary to satisfy the requirements for a degree.

COURSES FOR TEACHERS' CERTIFICATES IN THE PROVINCE OF ONTARIO

(Agreement of 1920)

I. Ordinary Certificates

The academic standing for admission to the professional Course leading to an ordinary High School Assistant's certificate is the degree of Bachelor or Master of Arts, Bachelor or Master of Science, or Bachelor of Commerce, from a British University, based upon Courses approved by the Minister of Education.

Each applicant must have Honour Matriculation standing in English, History, and Mathematics, or equivalent, if his degree Course did not include these subjects.

II. Specialists' Certificates

Subject to the conditions specified below, the academic standing required of Specialists may be obtained by completing a course in Arts with Honours in one of the following groups:

Greek and Latin	French and German or Spanish
English and History	Mathematics and Physics
English and French	Science
English and German or Spanish	B.Com. Course (Specialist's Option)

Candidates for a Specialist's certificate in Science, should take the regular Honour Course in two of Physics, Chemistry, and Biology or one of the special Honour Courses referred to above under "Concentration of Work."

1. The Course shall extend over at least five years from Pass Matriculation or, as may be determined by the regulations of the University concerned, over four years from Honour Matriculation.

2. Candidates shall attend for at least two full academic years. Under the direction of the University they may substitute for one of those years at least two summer sesions.

3. The standard for each year shall be that prescribed by the University for candidates taking Honour Courses. A candidate who has completed the requirements for an Honour degree from the University but has not complied with the regulations as to time required for Specialist's standing may receive the Honour B.A. and later complete any further work required for the Specialist certificate.

A graduate of the Faculty of Applied Science may obtain the standing required for Specialists by taking certain additional courses as stated below.

III. Specialists' Certificates for Graduates in Applied Science

1. In Mathematics and Physics

A degree in Applied Science in one of the Courses of Mining and Metallurgical Engineering, Chemistry, Mineralogy and Geology, Chemical and Metallurgical Engineering, Civil Engineering, Mechanical Engineering, or Electrical Engineering with a subsequent standing of at leat 55 per cent. in each of the following courses and an average of 66 per cent. in the work of each subject:

Mathematics 10a, 11b, 12a, 13a, 15a, 16b.

Physics 10b, 12a, 13b, 14a.

credit towards these being given when equivalent subjects have been satisfactorily taken in course.

or,

A degree in Applied Science in the Department of Physics with subsequent standing of at least 55 per cent. in each of the following courses and an average of 66 per cent. in the work of each subject:

Mathematics 10a, 11b, 12a, 13a, 15a, 16b, and another advanced full course.

Physics 10b, 12a, 13b, 14a.

credit towards these being given when equivalent subjects have been satisfactorily taken in course.

2. For Specialist Standing in Science

A degree in Applied Science in one of the Departments of Mining and Metallurgical Engineering, Chemistry, Mineralogy, Geology, Chemical and Metallurgical Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, or Physics, with a subsequent standing of at least 55 per cent. in each of the following courses, and an average of 66 per cent. in the work of each subject in courses numbered 10 or over:

Biology 1, 2, 11, 16,
Physics 11, or 14a and 13b.
Geology 1,
Mineralogy 1,

Chemistry 2, and one of 21, 31, 41, 71 not previouly taken,
credit towards these being given when equivalent subjects have been satisfactorily taken in course.

It is understood that according to the regulations of the Department of Education professional certificates to teach in High School and Col-

legiate Institutes are given only to persons who have credit for Upper School work in English, Mathematics, and History, or the equivalent of these in University work.

III. Inspectors' Certificates

The academic requirements for a Public School Inspector's certificate are as follows:

(1) An Honour degree in Arts or the degree of B.Com. (Commercial Specialists' Option) in accordance with the present agreement as prescribed for Specialist qualifications, or

(2) A Pass degree in Arts with a standard of 66% in any five courses beyond course 1, and second division in any other five courses, as set forth in the Calendar of Queen's University for the academic year, 1931-32.

(3) A candidate shall extend his Course over at least four years from Junior Matriculation and he shall attend the University classes (i) for at least two complete sessions approved by the University, or (ii) for at leat one complete session, and two complete sessions of the Summer School, or (iii) for at least four complete sessions of the Summer School, or the equivalent thereof, with the supervision prescribed by the scheme agreed upon between the Department and the University.

COURSES IN COMMERCE AND ADMINISTRATION

These Courses, leading to the degree of Bachelor of Commerce, were established in 1919 to assist in meeting the need which exists in Canada of more systematic training for business and public service.

The Courses in Banking established in 1914 by Queen's University in co-operation with the Canadian Bankers' Asociation will hereafter be continued as part of the Courses in Commerce and Administration.

For further particulars consult ANNOUNCEMENT OF THE COURSES IN COMMERCE AND ADMINISTRATION, of which copies may be obtained from the Registrar.

COMBINED COURSE IN ARTS AND APPLIED SCIENCE

A course leading to the Degree of B.A. and B.Sc. in six years.

Students taking this Course are required to have Arts Matriculation and to register for the first two years in Arts alone and to pay the full Arts fees; to register for the third and fourth years in both Arts and Applied Science, paying the registration fees only in Arts and the Applied Science fees in full, including those of the Engineering Society; and to register for the last two years in Applied Science only,

paying full fees. Arts classes are subject to the regulations in the Arts Calendar and Applied Science classes to the regulations in the Applied Science Calendar; but the regulations of the Faculty of Applied Science concerning students who fail to pass their classes will apply to those Courses throughout.

The courses must be taken in the order in which they are laid down in the Calendar.

The degree of B.A. will be conferred on candidates who complete four years' work with a minimum standing of fifty per cent. and sixty-two per cent. in half their classes.

Subjects numbered in Roman numerals are taken in the Faculty of Applied Science.

First Year

1. English 1
2. French 1 or German 1
3. Mathematics 1
4. Mathematics IV (Science)
5. Astronomy I (Science)
6. Physics 1
7. Chemistry 1

Second Year

1. English 2
2. French 2 or German 2
3. Philosophy 1 or 2
4. ⎫ Two of History 1, 2, 3,
5. ⎭ Economics 2

Third Year

1. Course from Group I.
2. Course in a subject previously taken, but not covered by the later courses in Science.
3. Mathematics I, II and III.
4. Surveying I.
5. Drawing I.
6. Projections I.

Fourth, Fifth, and Sixth Years

The fourth, fifth, and sixth years are the same as the second, third, and fourth years of the B.Sc. Course. Sees the Calendar of the Faculty of Applied Science.

COMBINED COURSE IN ARTS AND THEOLOGY LEADING TO THE PASS B.A. DEGREE IN FIVE YEARS

Queen's University and Queen's Theological College join in offering a Combined Course in Arts and Theology. The complete Course covers six years. The first, second and third years are entirely within the Faculty of Arts and the candidate must pay full Arts fees. The fourth year consists of one Arts class, for which a fee of $25 is charged.

and of the first year in Theology. The fifth and sixth years of the Combined Course are the second and third years in Theology.

The degree of Bachelor of Arts is awarded at the end of the fifth year to candidates who have passed in all their subjects and made second divisions in at least half their Arts classes. The subjects covered are given below:

First Year

1. English 1
2. Greek A
3. Latin 1
4. Mathematics 1
5. Science

Second Year

1. English 2
2. Greek 1
3. Hebrew 1
4. Science
5. Philosophy 1 or 2

Third Year

1. Option
2. Greek 2
3. Hebrew 2
4. Option
5. Option

Fourth Year

1. An Arts course
2. Church History
3. Systematic Theology
4. O. T. Criticism
5. N. T. Criticism
6. Practical Theology and Public Speaking.

Fifth Year

1. Church History
2. Systematic Theology
3. O. T. Criticism
4. N. T. Criticism
5. Practical Theology

If a student has Matriculation in Greek he will take Greek 1 and 2 in the first two years, and a freely chosen class in place of Greek 2 in the third year.

In choosing his options a student must plan to complete three courses in each of two subjects by the end of the fourth year.

DETAILS OF COURSES OF INSTRUCTION

LATIN LANGUAGE AND LITERATURE

PROFESSOR—Richard Orlando Jolliffe, Ph.D.

PROFESSOR IN CLASSICS—H. L. Tracy, B.A., Ph.D.

ASSISTANT PROFESSOR OF CLASSICS—L. E. Law, B.A.

LECTURER IN CLASSICS—Mary L. Macdonnell, M.A.

LECTURER IN LATIN—C. R. Tracy, B.A.

TUTORS—Doris M. Honeywell, Anne C. Johnson, M. Margaret McQuade, B.A., W. H. Showman, B.A., J. H. Stewart.

GENERAL NOTICE TO STUDENTS IN LATIN

A good Latin dictionary is an absolute necessity. For the Pass classes, Lewis' *Latin Dictionary for Schools* (Oxford Press) is recommended, or Lewis' *Elementary Latin Dictionary* (Oxford Press). Honour students must provide themselves with Lewis and Short's *Latin Dictionary* (Oxford Press). All students should own and use a Classical Dictionary — Smith's *Smaller Classical Dictionary* (Everyman's Library) is convenient and cheap — and a Classical Atlas (*Atlas of Ancient and Classical Geography* in Everyman's Library or Murray's *Classical Atlas*). A Latin grammar is indispensable. In all Pass classes Bennett's *Latin Grammar* (Allyn and Bacon) will be used. Honour students will require Allen and Greenough's *New Latin Grammar* (Ginn and Co.). Gow's *Companion to School Classics* (Macmillan) is a useful general handbook.

SIGHT TRANSLATION. *Ability to translate Latin at sight will be tested on every examination paper in authors. The best preparation for translation at sight consists in the careful and honest reading of the prescribed texts without the aid of a translation.*

REGULATIONS

1. Latin 1 is a prerequisite of Latin 2, and Latin 2 of all other courses.

2. A student taking Latin as one of his main subjects on a Pass Course under new regulations will take Latin 1, 2, and 3.

3. For Honours in Latin a student will take courses 1, 2, 66 (a and b), and from four to eight half-courses to be chosen after consultation with the department. In the third year students will ordinarily make this selection from courses numbered 30-39 and 50-59, and in the fourth year from courses numbered 40-49. Honour students may take Latin 2 and 10 in the same session.

COURSES OF INSTRUCTION

LATIN A. PREPARATORY COURSE.

This course is intended only to provide assistance for students preparing for Pass Matriculation examination in Latin. *No University examination for credit will be given, nor does this course admit unmatriculated students to Latin* 1.

Texts:

Ontario High School Latin Book.
High School Latin Reader (Macmillan).
Selections from Virgil (Gage).

Monday, Tuesday, Wednesday, and Friday at 1.

LATIN 1. TRANSLATION AND INTERPRETATION of Prescribed Texts, Sight Translation, Grammar and Prose Composition.

Note.—The examination will be divided into three sections corresponding to the above. Students must satisfy the examiners in each of the three sections of the paper.

Prescribed Texts:

Petrie, *A Latin Reader with an Introduction to Roman History* (Oxford Press) 1931-32; Selections from Caesar, Cicero, Pliny, Sallust, Livy, Catullus, Virgil, Horace.

Sight Translation of passages in prose or poetry similar in style and difficulty to the prescribed texts.

Bennett, *Latin Grammar* (Allyn and Bacon).

LATIN PROSE COMPOSITION: Weekly exercises will be assigned based on a syllabus of Latin Prose Composition prepared by the department and obtainable from the Technical Supplies department. An extra tutorial period will be given for the benefit of students whose class-work is unsatisfactory.

Monday, Wednesday, and Friday at 10.

LATIN 2. TRANSLATION AND INTERPRETATION of Prescribed Texts, Sight Translation, Grammar and Prose Composition.

Note.—The examination will be divided into three sections corresponding to the above. Students must satisfy the examiners in each of the three sections of the paper.

Prescribed Texts:

Cicero, *De Imperio Cn. Pompeii*; *pro Archia*; *Philippica IX* (*Select Orations of Cicero*: King, Oxford Univ. Press).

Virgil, Selections from the *Eclogues*, *Georgics* and *Æneid*.
P. Vergili Maronis Opera (Sidgwick, Cambridge University Press, 2 vols.).

Bennett, *Latin Grammar* (Allyn and Bacon).

Bradley-Arnold, *Latin Prose Composition* (London; Longmans, Green and Co.).

Sight Translation of passages in prose or poetry similar in style and difficulty to the prescribed texts.

LATIN PROSE COMPOSITION: Weekly exercises will be assigned, based on specified portions of Latin Grammar.

Tuesday, Thursday, and Saturday at 11.

LATIN 3. HORACE AND CAESAR.

Horace: *Satires* (Horace, *Satires*, edited by A. Palmer; The Macmillan Co., Toronto).

Caesar: *De Bello Civili* (Caesar, *Civil War*, edited by Moberly; Oxford, Clarendon Press).

Bradley-Arnold, *Latin Prose Composition* (London; Longmans, Green and Co.).

Tuesday, Thursday, and Saturday at 10.

LATIN 10. CICERO, SALLUST, VIRGIL.

This course is the foundation for further Honours Courses in Latin, and is a prerequisite for other advanced courses. It may be taken along with Latin 2 by students who have made a second division in Latin 1 or in Upper School Latin. The morphology, syntax and structure of the language will be studied.

Prescribed Texts:

Cicero: *The Catilinarian Orations*, (Wilkins: The Macmillan Company, London).

Sallust: *Catiline* (Capes; Oxford, Clarendon Press).

Virgil: *Aeneid VI*, (P. Vergili Maronis Opera, Sidgwick, 2 vols.; Cambridge, University Press).

Monday, Wednesday, and Friday at 9.

LATIN 30a. CATULLUS.

Catullus (Merrill; Ginn and Co.., Boston).

Monday, Wednesday, and Friday at 10.

LATIN 32a. HORACE.

Horace: *The Odes and Epodes* (Shorey and Laing: B. H. Sanborn and Co., Boston).

Sellar, *Horace and the Elegiac Poets* (Oxford; University Press).

Monday, Wednesday, and Friday at 11.

LATIN 40a. HORACE.

Horace: *The Epistles and Ars Poetica* (Wilkins: The Macmillan Co., Toronto).

Sellar, *Horace and the Elegiac Poets* (Oxford: University Press).

Monday, Wednesday, and Friday at 11.

LATIN 41b. CICERO'S LETTERS.

Cicero, *Select Letters* (How: Oxford, University Press; 2 vols.).

Monday, Wednesday, and Friday at 9.

LATIN 44a. VIRGIL. Aeneid I-VI.

P. Vergili Maronis Opera (Sidgwick; Cambridge, University Press, 2 vols.).

A study of the Latin Epic, with particular attention to its style, content, and poetic quality.

Sellar, *Roman Poets of the Augustan Age, Virgil* (Oxford, University Press).

Monday, Wednesday, and Friday at 9.

LATIN 45b. TACITUS.

Tacitus: *Annals xiii-xvi* (Pitman; Oxford, University Press).

Monday, Wednesday, and Friday at 11.

LATIN 51b. LIVY.

Livy: *Book I* (Edwards; Cambridge, University Press).

Livy: *Book V* (Whibley; Cambridge, University Press).

Tuesday, Thursday, and Saturday at 11.

LATIN 66 (a and b). LATIN PROSE; HISTORY OF THE EARLY EMPIRE (14 A.D.-96 A.D.); THE HISTORY OF LATIN LITERATURE.

Lectures on Latin prose style, supplemented by a weekly theme. Lectures, colloquia, and essays on the history of the Early Empire. The history of Latin Literature, illustrated by reading in the original texts.

Tuesday, Thursday, and Saturday at 9.

LATIN 100, THE LATIN NOVEL. Apuleius, *The Metamorphoses.*

This course will include lectures on (i) The sources and development of the Latin novel; (ii) The Roman belief in magic; (iii) The religion of Isis.

Open only to candidates for the degree of M.A.

Monday, Wednesday, and Friday at 10. Professor Jolliffe.

DIRECTED SPECIAL STUDIES. RESEARCH COURSE IN VIRGIL.

This course will deal with problems of origin, structure, and style in the *Aeneid.*

Open only to candidates for the degree of M.A.

Professor Jolliffe.

GREEK LANGUAGE AND LITERATURE

PROFESSOR—T. Callander, M.A.
PROFESSOR IN CLASSICS—H. L. Tracy, B.A., Ph.D.
ASSISTANT PROFESSOR IN CLASSICS—L. E. Law, B.A.
LECTURER IN CLASSICS—Mary L. Macdonnell, M.A.

GENERAL NOTICE TO STUDENTS IN GREEK

The *Greek Dictionary* recommended is by Liddell and Scott (Abridged Edition). A *Greek Grammar*, preferably Goodwin's or Smyth's, is also necessary. Murray's *Classical Atlas*, Jebb's *Primer of Greek Literature*, or Norwood's *Writers of Greece*, Maisch's *Greek Antiquities*, and Bury's *History of Greece* are indispensable.

PROSE COMPOSITION. Students taking Greek as their Major or Minor, and Honour students in their first year work, will use Sidgwick's *Greek Prose Composition.*

REGULATIONS

Greek A may be counted towards a degree and towards Honours under conditions specified in section 16 of GENERAL REGULATIONS. Students who enter the University without matriculation in Greek, and yet desire to specialize in this subject, may complete their programme of work in the usual time. If Greek A is taken in the winter session, Greek 1 may be taken in the summer provided that Greek A be not counted as a course.

Students offering Greek as one of the main subjects on a Pass Course under new regulations will take Greek 1, 2, 25a and 32b, or A, 1 and 2 if they have not matriculated in Greek.

For Honours in Greek a student must take from five to seven courses, including 62 a and b.

Honour students should take in the same session Greek 2 and 10.

COURSES OF INSTRUCTION

GREEK A. FOR BEGINNERS.

The text-book is White, *First Greek Book* (Ginn and Co.). The object of the course is to prepare students for entering the regular classes in Greek, and to cover an amount of work as nearly as possible the equivalent of Matriculation Greek. The elements of the language will be the chief concern; some continuous reading, however, will be done in passages suited to the ability of the student.

Tuesday, Thursday, and Saturday at 9 *and Wednesday at* 1.
Miss Macdonnell.

GREEK 1.

1. TEXTS FOR SPECIAL STUDY:
   Freeman and Lowe, *Greek Reader* (Oxford Press).
   The Iliad, I-XII, Leaf and Bayfield (Macmillan). Selections.
   The Acts of the Apostles, chapters i-v. Westcott and Hort's *New Testament*.
2. UNSEEN TRANSLATION.
3. COMPOSITION.
   Pitman, *Greek Prose Composition*.
4. GRAMMAR.
   Goodwin, *Greek Grammar*.
5. GENERAL READING:
   Bury, *History of Greece*, chapters i-v.
   Jebb, *Primer of Greek Literature* and *Introduction to Homer*.

Tuesday, Thursday, and Saturday at 10.
Miss Macdonnell.

GREEK 2.

1. TEXTS FOR SPECIAL STUDY:
   Euripides, *Alcestis*, ed. Earle (Macmillan).
   Plato, *Apology*, ed. Stock (Oxford Press).
   The Epistle to the Galatians, Williams (Cambridge Press).
2. UNSEEN TRANSLATION.
3. COMPOSITION.
   North and Hillard, *Greek Prose Composition* (Rivington's).
4. GRAMMAR.
   Goodwin, *Greek Grammar*.
5. GENERAL READING:
   Sheppard, *Greek Tragedy* (Cambridge Press).
   Maisch, *Greek Antiquities*.
   Bury, *History of Greece*, chapters vi-xi. Every member of the class in Greek 2 should make himself familiar with the outlines of Greek History at the beginning of his course. Lectures on this subject will be given during the session.

Monday, Wednesday, and Friday at 10.
Professor Callander.

GREEK 10. To be taken along with Greek 2. This course will provide the necessary foundation for work in Honours. The prescribed texts are:
Xenophon, *Anabasis*, V-VII, Nall (Macmillan).
Plutarch, *Lives of Themistocles and Pericles*, Holden(Macmillan).

Monday, Wednesday, and Friday at 11.
Professor Callander.

GREEK 25a. HISTORIANS.
Thucydides, Book I (Macmillan).
Monday, Wednesday, and Friday at 11.
Professor Law.

GREEK 32b. GREEK TRAGEDY. Set books are:
Aeschylus, *Persae*, in Loeb Library (Heinemann).
Sophocles, *Antigone*, Jebb, abridged (Cambridge Press).
Euripides, *Hecuba*, Heberden (Clarendon Press).
Tuesday, Thursday, and Saturday at 11.
Professor Callander.

GREEK 33a. GREEK TRAGEDY. Set books are:
Aeschylus, *Prometheus*, in Loeb Library (Heinemann).
Sophocles, *Oedipus Coloneus*, in Loeb Library (Heinemann).
Euripides, *Bacchae*, Tyrrell (Macmillan).
(Not given in 1931-32).

GREEK 40a. GREEK PHILOSOPHY. Plato, *Euthyphro*, *Crito* and *Phaedo*.
Tuesday, Thursday, and Saturday at 11.
Professor Tracy.

GREEK 42b. GREEK PHILOSOPHY. Plato, *Gorgias*, Lodge (Ginn and Co.).
(Not given in 1931-32).

GREEK 47b. GREEK ORATORY. Demosthenes, *Philippics*, I-III, Abbot and Matheson (Oxford University Press).
(Not given in 1931-32).

GREEK 46b. GREEK ORATORY. Demosthenes, *Olynthiacs*, Abbot and Matheson (Clarendon Press), and Lysias, *Orations*, Shuckburgh (Macmillan).
Monday, Wednesday, and Friday at 11. Miss Macdonnell.

GREEK 62, a and b. GREEK PHILOSOPHY. Selected portions of Plato's *Republic* (Adam, *Republic of Plato*, Vol. II). One hour a week will be given to Greek Prose Composition.
This course must be taken by all Honour students in the Department of Greek.
Tuesday, Thursday, and Saturday at 10.
Professor Callander and Professor Tracy.

GREEK 109. GREEK TRAGEDY. A mature study of Aeschylus, *Agamemnon*, Sidgwick (Oxford University Press), Sophocles, *Electra*, Jebb (Cambridge University Press), Euripides, *Electra* (Oxford Classical Texts, vol. II), combined with readings in Aristotle, *Poetics*, Bywater (Oxford University Press).
Open only to candidates for the M.A.

GREEK AND ROMAN CIVILIZATION

An interpretation of the contribution of Greece and Rome to Western civilization, in politics, literature, art, and philosophy.

Breasted, *Ancient Times* (Boston, Ginn and Co.),

Other texts will be prescribed at the beginning of the term.

Readings will be assigned on various topics as they develop.

Monday, Wednesday, and Friday at 9.

Professor Callander.

HEBREW

PROFESSOR—Rev. H. A. Kent, M.A., D.D.

REGULATIONS

Students proceeding to Theology may, with the permission of the Board of Studies, substitute Hebrew 1 for a course in Latin.

COURSES OF INSTRUCTION

HEBREW 1.

The aim of this class is to enable students to read any of the narrative parts of the Hebrew Scripture. The Christmas term is devoted entirely to thorough study and practice of grammar and exercises. After the Christmas vacation parts of Genesis and Samuel, or other books, will be read, in addition to the work in grammar and composition.

Text-books: Davidson, *Hebrew Grammar* (20th or later editions), pages 1-113. Kittel, *Biblia Hebraica*, or *Hebrew Bible*, issued by B. and F. Bible Society.
Lexicons. Brown-Driver-Briggs, or Bagster.
Tuesday, Thursday, and Saturday at 8. Professor Kent.

HEBREW 2.

This class aims at more advanced work in the Hebrew language than that attempted in course 1. The prophetic and poetic literature of the Old Testament will be studied and lectures given on Hebrew Syntax and the principles of Textual Criticism of the Old Testament. Students will be practised regularly in translating English into Hebrew, both viva voce and in written exercises.

Text-books: Davidson, *Hebrew Grammar*, pages 113-236, *Hebrew Syntax*. *Hebrew Bible* and *Lexicon* as in course 1.
Tuesday, Thursday, and Friday at 3. Professor Kent.

BIBLICAL LITERATURE

PROFESSOR—Rev. H. A. Kent, M.A., D.D.

REGULATIONS

1. Courses 1 and 2 are offered in alternate years. Only one of them may be counted towards a degree.

2. Subject to the provision of Section 1, the courses offered below are open to any student who has satisfied the requirements for concentration and distribution but needs one or more classes to make the necessary total for a degree.

BIBLICAL LITERATURE 1. OLD TESTAMENT LITERATURE AND HISTORY.

The beginnings of Hebrew literature; ballads; war-songs; folk-lore and Saga; historical prose; the literary sources of the Hexateuch and historical books; the origin and development of prophecy; Hebrew poetry and wisdom literature; the Apocryphal and Apocalyptic writings. Hebrew political history down to the Maccabean period, and the relation of the Hebrew people to the surrounding nations of antiquity.

Offered in 1932-1933, but not in 1931-1932.

P. C. Sands, *Literary Genius of the Old Testament.*
Jordan, *Ancient Hebrew Stories.*
Martin, *The Meaning of the Old Testament.*

Tuesday, Thursday and Friday at 2. Professor Kent.

BIBLICAL LITERATURE 2. NEW TESTAMENT LITERATURE AND HISTORY.

Origin of New Testament writings: Codices and Manuscripts; the Latin Bible; the English Versions; the Gospels studied as the literary sources of the teaching of Jesus; the Synoptic and Johannine Problems; the life and letters of St. Paul; the Christian Apocalypses; the social and religious conditions in the Roman Empire and the spread of Christianity up to the end of the first century.

Offered in 1931-1932, but not in 1932-1933.

Text-books:

Moffatt, *New Translation of the New Testament.*
Goodspeed, *The Story of the New Testament.*
Glover, *The Jesus of History.*
Robinson, *Life of Paul.*

Tuesday, Thursday, and Friday at 2. Professor Kent.

GERMANIC LANGUAGES AND LITERATURES

PROFESSOR—O. L. Bockstahler, A.B. (Cum Laude), M.A.
ASSISTANT PROFESSOR—Hilda C. Laird, B.A.
LECTURER—

REGULATIONS

1. German A may be counted towards a degree and towards Honours under conditions specified in section 16 of GENERAL REGULATIONS. Students who enter the University without matriculation in German, and yet desire to specialize in this subject may complete their programme of work in the usual time. If German A is taken in the winter session, German 1 may be taken in the summer, but in this case German A must not be counted as a course.

2. Students taking German as one of the three main subjects on a Pass Course under new regulations should take 1, 2, 21a and 22b (or A, 1, and 2 if not matriculated in German).

3. Students making German one of their Honour subjects must select from five to seven courses or equivalent from 1, 2, 11a, 12b, 32, 21a, 22b, 23a, 24b, 33a, 36b. Those who make German their main subject must also take 99.

4. Students taking Honours in German should read as many of the prescribed works as possible during the long summer vacation, and present a report on such work at the beginning of the next term.

5. While the direct method will be more or less used from the beginning, the advanced classes will be conducted mainly in German.

6. Students should provide themselves at once with a dictionary, at first James' *English-German Dictionary*, then an all German one such as Hoffmann's *Wörterbuch der deutschen Sprache.*

7. The courses in Scandinavian (B, 25, 26b) may be credited towards a degree as optional courses, but may not be included in the Honour group.

GERMAN A. PREPARATORY GERMAN.

This course is intended to meet the needs of students who, owing to the inadequate conditions in most of the secondary schools, enter the University with little or no knowledge of German. It is taken by students who need it to complete their Matriculation, or who desire to pursue a course in which German text-books or works of reference are prescribed or recommended. The requirements correspond generally to those for Pass Matriculation.

The work comprises drill on pronunciation, a study of the elements of grammar, the reading of easy literature, dictation, oral and written composition. *Deutsch für Anfänger* and *Lesebuch für Anfänger* should be purchased together.

Text-books:—

Hagboldt and Kaufmann, *Deutsch für Anfänger.* (University of Chicago Press).

Hagboldt and Kaufmann, *Lesebuch für Anfänger.* (University of Chicago Press).

Alexis and Pfeiler, *In Deutschland.* (Midwest Book Co.).

Pope, *German Reader for Beginners,* New Series. (Holt and Co.).

Collman, *Easy German Poetry.* (Ginn) (Part I).

Section 1, *Monday, Wednesday, and Friday at* 11.
Section 2, *Tuesday, Thursday, and Saturday at* 8.
Both sections, *Monday at* 4.

GERMAN B. ELEMENTARY SCANDINAVIAN.

The aim of this course is to give the student a reading knowledge of Swedish and Dano-Norwegian, and thus open to him the rich store of modern Scandinavian literature.

A knowledge of German is not required, but is helpful. Students specializing in German, and desiring advanced credit for this work, should register for courses 25a and 26b instead where the work is conducted in German and Scandinavian.

Text-books:—

Elmquist, *Swedish Grammar* (Augustana Book Concern).

Lagerlöf, *Valda Berättelser* (Augustana Book Concern).

One of the following:

Ibsen, *Et dukkehjem* (Gyldendalske Boghandel).

Björnson, *Synnöve Solbakken* (Free Church Book Concern).

This course will be given at an hour to be arranged if there is a sufficient demand.

GERMAN 1. FIRST YEAR GERMAN.

The work embraces the reading of modern authors, a more advanced study of grammar and syntax (in connection with the texts read and the written and oral exercises), memorizing of poems, writing from dictation, translation at sight, composition and oral practice.

Text-books:—

Schrag and Alexis, *First Course in German,* Review Lessons. (Midwest Book Co.).

Betz, *Modern German Reader* (Heath).

Mörike, *Mozart auf der Reise nach Prag* (Heath).

Lessing, *Minne von Barnhelm* (Oxford).

Collman, *Easy German Poetry,* (Part II) (Ginn).

Pattou, *An American in Germany* (Heath).

Tuesday, Thursday, and Saturday at 9; *Monday at* 4.

GERMAN 2. SECOND YEAR GERMAN.

The work consists of a more critical reading of modern literature, both prose and verse, oral and written composition based on this literature, with a more advanced study of grammar and syntax. (A prize of ten dollars in books is offered for the student who obtains the highest standing in German 2.)

Text-books:—

Fiedler, *German Short Stories* (Oxford).
Storm, *Der Schimmelreiter* (Ginn).
Diamond, *Mitten im Leben* (Holt).
Heine, *Die Harzreise* (Heath).
Schiller, *Wilhelm Tell* (Holt).
Goethe, *Hermann und Dorothea* (Oxford).

Monday, Wednesday, and Friday at 10.

GERMAN 3a. SCEINTIFIC GERMAN. See Calendar for Applied Science.

GERMAN 11a.

An outline of Lessing's life and time precedes a critical reading of his most important dramatic, dramaturgic, and philosophical works.

Not offered in 1931-32.

Text-books:—

Löschhorn, *Lessings Leben und Werke* (Velhagen).
Franz, *Hilfsbuch zu Lessing* (Velhagen).
Lessing, *Minna von Barnhelm* (Holt), *Emilia Galotti* (Heath), *Nathan der Weise* (Ginn), *Hamburgische Dramaturgie*, selections (Holt), *Briefe und Abhandlungen*, selections (Velhagen). *Fabeln u. Abhandlung über die Fabel.*

Monday, Wednesday, and Friday at 11.

GERMAN 12b. GOETHE'S LIFE AND WORKS.

An outline of the poet's life and time precedes a critical study of his most important dramatic and lyrical productions.

Not offered in 1931-32.

Text-books:—

Heinemann, *Goethes Leben und Werke* (Velhagen).
Weitbrecht, *Deutsche Literaturgeschichte der Klassikerzeit* (Göschen).
Goethe, *Faust, I* (Hesse), *Iphigenie auf Tauris* (Holt), *Torquato Tasso* (Ginn), *Egmont* (Holt), *Poems*, selections (Holt), *Das Märchen* (Heath), *Novelle*, *Shakespeare* (Ehlermann).

Monday, Wednesday and Friday at 8.

GERMAN 21a. SCHILLER.

The reading and interpretation of selected dramas, poems, letters, historical and philosophical writings will be accompanied by a rapid survey of the whole classical period, with special emphasis on the Storm-und-Stress movement. Lectures and discussions.
The course will be based on Thomas' *Life and Works of Schiller* (Holt).

Text-books:—

Kabale und Liebe (Holt), *Die Jungfrau von Orleans* (Ginn), *Wallenstein* (Holt), *Wilhelm Hell* (Holt) Poems, selections (Holt) Schiller Goethe Correspondence (Ginn), *Braut von Messina.*

References:—

Lyon, *Schillers Leben und Werke* (Velhagen).
Kuehnemann, *Schiller* (Ginn).
Bellermann, *Schillers Dramen*, 2nd Edition.
Boyeson, *Goethe and Schiller.*
Harnack, Schiller (Hoffmann).

Monday, Wednesday, and Friday at 9.

GERMAN 22b. GERMAN DRAMA.

This course intends to give in outline the history and technique of the German Drama of the nineteenth century. A number of the more suitable representative works will be selected from the following list and critically studied. Lectures and discussions.
The course will be based on Witkowski, *Das Deutsche Drama des 19tn. Jahrhunderts* (Teubner).

Tieck, *Der Gestiefelte Kater;* Brentano, *Die Lustigen Musikanten;* Werner, *Der Vierundzwangste Februar;* Kleist, *Der Zerbrochene Krug, Prinz von Homburg* (Ginn); Grillparzer, *Des Meeres und der Liebe Wellen* (Oxford). *Weh' dem der Lügt* (Longmans); Grabbe, *Don Jaun und Faust;* Gutzkow, *Zopf und Schwert* (Cambridge), *Uriel Acosta* (Holt); Halm, *Griseldis;* Freytag, *Die Journalisten* (Heath); Hebbel, Judith, *Agnes Bernauer* (Oxford); Ludwig, *Der Erbförster* (Holt); Ansengruber, *Das Vierte Gebot;* Wagner, *Parzifal;* Wildenbruch, *Das Neue Gebot;* Ibsen, *Die Stützen der Gesellschaft;* Holz und Schlaf, *Die Familie Selike;* Sudermann, *Heimat* (Heath), *Die Ehre;* Hauptmann, *Die Versunkene Glocke* (Holt); Schnitzler, *Der Einsame Weg.*

Monday, Wednesday, and Friday at 9.

GERMAN 23a. DIE NOVELLE.

The Novellen to be read will be chosen from the following list:

Text-books:—

Goethe, *Novelle* (Insel).
Tieck, *Des Lebens Überfluss* (Insel).
E. T. A. Hoffmann, *Meister Martin der Küfer* (Holt).
H. von Kleist, *Michael Kohlhaas* (Holt).
Fouqué, *Undine* (Holt).
Chamisso, *Peter Schlemihl* (Holt).
Eichendorf, *Aus dem Leben eines Taugenichts* (Holt).
Droste-Hülshoff, *Die Judenbuche* (Oxford).
Mörike, *Mozart auf der Reise nach Prag* (Ginn).
O. Ludwig, *Zwischen Himmel und Erde* (Heath).
Storm, *Pole Poppenspäler* (Holt).
Keller, *Romeo und Julie auf dem Dorfe* (Holt).
Riehl, *Die vierzehn Nothelfer* (Ginn).
K. F. Meyer, *Der Heilige* (Holt).
Heyse, *L'Arrabiata* (Ginn).
Rosegger, *Schriften des Waldschulmeisters* (Holt).
Sudermann, *Iolanthes Hochzeit.*
Hauptmann, *Der Ketzer von Soana* (Fischer).
Stefan Zweig, *Die Augen des ewigen Bruders* (Insel).
Thomas Mann, *Tonio Kröger* (Fischer).

Tuesday, Thursday, and Saturday at 10.

GERMAN 24b. LYRICS AND BALLADS.

This course gives in outline the history of the ballads and lyrics during the eighteenth and nineteenth centuries. A number of representative poets are studied critically in class, and some of their outstanding poems are committed to memory.
The text will be: Vos and Barba, *German Lyrics and Ballads*, (Holt).

References:—

Spiero, *Geschichte der deutschen Lyrik seit Claudius* (Teubner).
Fiedler, *A Book of German Verse* (Oxford Press).
Benzmann, *Moderne deutsche Dichtung* (Reclam).
Bethge, *Deutsche Lyrik seit Lilliencron* (Hesse and Becker).
Naumann, *Deutsche Dichtung der Gegenwart* (Metzler).

Tuesday, Thursday, Saturday at 10.

SWEDISH. GERMAN 25a.

Not offered in 1931-32.

GERMAN 26b. DANO-NORWEGIAN.

Not offered in 1931-32.

GERMAN 32. SURVEY OF GERMAN LITERATURE AND HISTORY.

An outline of the history of German literature from the migrations to the present time, including its setting in the political and cultural history of the country. Lectures and assigned readings.

Not offered in 1931-32.

Text-books:—

Whitney and Stroebe, *Geschichte der deutschen Literatur* (Holt).
Thomas, *An Anthology of German Literature* (Heath).
Vos and Barba, *German Lyrics and Ballads* (Holt).

References:—

Heinemann, *Deutsche Dichtung* (Kroner).
Gunther, *Deutsche Kulturgeschichte* (Göschen).
Robinson, *History of Western Europe.*
Henderson, *History of Germany.*
Emerton, *History of Medieval Civilization...*

GERMAN 33a. HISTORY OF THE GERMAN LANGUAGE.

This course outlines the origin of the Germanic languages and the development of Modern High German. It is intended to serve as an introduction to a study of the older dialects. The development of inflectional endings, prefixes, and suffixes and their meanings, phonology and syntax will be stressed.

Text-book:—Diskhof, *The German Language* (Oxford).

References:—

Wright, *Historical German Grammar.*
Lyon, *Handbuch der deutschen Sprache, II* (Teubner).
Kirk, *Historical Study of New High German* (Longmans).

Time to be arranged.

GERMAN 34b. PHILOSOPHICAL AND HISTORICAL GERMAN.

The extracts included in this course are contained in the volume *Geistige Werte* by Frischeisen-Köhler (Otto Reichl, Berlin).

Kant, *Vom guten Willen.*
Von der Pflicht.
Von dem praktischen Glauben.
Fichte, *Die Bestimmung des Menschen.*
Schelling, *Über das Verhältnis der bildenden Künste zu der Natur.*
Schleiermacher, *Über das Wesen der Religion.*

Schopenhauer, *Über den Tod und sein Verhältnis zur Unzerstörbarkeit unseres Wesens an sich.*
Hegel, *Der Sinn der Weltgeschichte.*
Fechner, *Die Tagesansicht gegenüber der Nachtansicht.*
Lotze, *Von der Persönlichkeit Gottes.*
Die Schöpfung als Wille, als Tat und als Emanation.
Nietzsche, *Leben und Weisheit.*
Dielthey, *Das metaphysische Bewusstsein.*
Herder, *Von der Weisen Güte im Schicksal der Menschen.*
Goethe, *Die Natur.*
Schiller, *Staat und Kultur.*

Not offered in 1931-32.

GERMAN 36b. ADVANCED GERMAN COMPOSITION.

Texts:—

Pope, *Writing and Speaking German,* New Series (Holt).
Hastings, *Studies of German Words and their Uses* (Heath).
Chamberlin, *Advanced Selections for Sight Translations* (Heath).
Carrington and Holzwarth, *German Composition* (Heath).

Time to be arranged.

GERMAN 99. SEMINAR COURSE FOR HONOUR STUDENTS making German their main subject. Discussions and reports on independent investigations. About twelve meetings per term will be held.

(*a*) The Literature of Romanticism.

The following works are read:
Jean Paul, *Leben des Quintus Fixlein* (Cotta).
Tieck, *Ausgewählte Werke* (Hesse).
Hoffmann, *Doge und Dogaresse* (Wiesbaden).
Novalis, *Ausgewählte Werke* (Hesse).
Chamisso, *Peter Schlemihl* (Heath).
Kleist, *Der zerbrochene Krug* (Reclam).
Eichendorff, *Aus dem Leben eines Taugenichts* (Holt).
Fouqué, *Undine* (Holt).
Grillparzer, *Die Ahnfrau* (Holt), *Der Arme Spielmann* (Cambridge Plain Texts).
Fiedler, *A Book of German Verse* (Oxford Press).
Schweizer, *Vom Deutschen Geist der Neuzeit,* selections, (Cambridge).
Walzel, *Deutsche Romantik* (Teubner).

(*b*) The Literature of Realism.

The following works are read:

Hebbel, *Agnes Bernauer* (Heath).

Freytag, Soll und Haben (Ginn), *Der Staat Friedrichs des Grossen* (Cambridge).

Fontane, *Grete Minde* (Holt).

Hauptmann, *Vor Sonnenaufgang*, *Die Weber* (Fischer).

Sudermann, *Frau Sorge* (Holt).

Ernst Zahn, *Lukas Hochstrassers Haus.*

Frenssen, *Jörn Uhl* (Grote).

Storm, *In St. Jürgen* (Heath).

Schweizer, *Vom Deutschen Geist der Neuzeit*, selections, (Cambridge).

Time to be arranged.

FRENCH

PROFESSOR—P. G. C. Campbell, M.A., Docteur de l'Université de Paris.

ASSOCIATE PROFESSORS—W. M. Conacher, B.A., D. ès L. (Montréal).

M. Tirol, O.A., L. ès L. (Paris), Ph.D. (London).

LECTURER—S. B. Wynburne, B.A.

INSTRUCTOR—Jeanne C. McConnell, Brevet Supérieur, C.A.P.

REGULATIONS

1. French 1 is a prerequisite of French 2 and French 2 of all other courses.

2. Students offering French as one of their main subjects on a Pass course will take 1, 2 and 8.

3. Honour students making French one of their Honour subjects after 1 and 2 will take 10 (or 11) and 13 in the third year, and in the fourth year 25 and 41.

4. All oral examinations must be taken at the University.

5. Honour groups for conversation and phonetic study will meet at hours to be arranged at the beginning of term.

6. For the Sir Wilfrid Laurier Memorial Scholarship of $100 awarded for proficiency in French conversation, see SCHOLARSHIPS.

COURSES OF INSTRUCTION

FRENCH A. PREPARATORY FRENCH.

This course is only intended to provide assistance for students preparing for the Pass Matriculation examination in French. No University examination for credit will be given nor does this course admit unmatriculated students to French 1.

Fraser and Squair, *High School French Grammar.*

The High School French Reader, with further readings.

Monday, Wednesday, and Friday at 2. Mme McConnell.

FRENCH 1. FIRST YEAR FRENCH.

Zola, *L'Attaque du Moulin* (Holt).

Daudet, *Jack* (Part I, Macmillan).

De Caillavet et de Flers, *Primerose* (Heath).

Favorite French Stories (Allyn and Bacon).

Duhamel and Minssen, *Primer of French Prose Composition* (Rivingtons).

Siepmann, *Short French Grammar* (Macmillan).

The oral examination will be held during the term.

Monday, Wednesday, and Friday at 9.

Tuesday, Thursday, and Saturday at 9.

Professors Campbell, Conacher, and Mr. Wynburne.

FRENCH 2. SECOND YEAR FRENCH.

Molière, *Le Malade Imaginaire* (Ginn).
Les Cent meilleurs Poèmes Lyriques. (Gowan and Grey).
Le Sage, *Gil Blas* (American Book Co.).
Bazin, *La Terre qui meurt* (Century Co.).
Contes de la France contemporaine (Heath).
Moore and Slight, *Intermediate French Course*, Part III, (Blackie).
Ritchie and Moore, *Junior Manual of French Composition* (Cambridge University Press).

but for Extra-mural students:—
Duhamel and Minssen, *French Prose Composition for Middle Forms* (Rivingtons).

The oral examination will be held during the term.

Monday, Wednesday, and Friday at 10.
Tuesday, Thursday, and Saturday at 10.
Professors Campbell, Conacher, Tirol, Mr. Wynburne.

FRENCH 8. THIRD YEAR PASS.

V. Hugo, *Hernani* (American Book Co.).
Balzac, *Cinq Scènes de la Comédie Humaine* (Heath).
Quelques Contes des Romanciers Naturalistes (Heath).
Becque, *Les Corbeaux* (Heath).
A. France, *Le Crime de Sylvestre Bonnard* (Holt).
Ritchie and Moore, *Junior Manual of French Composition* (Cambridge Univ. Press).

Monday, Wednesday, and Friday at 10.
Mr. Wynburne.

FRENCH 10. NINETEENTH CENTURY LITERATURE (1800-1850).

V. Hugo, *Hernani* (American Book Co.)
de Musset, *Il faut qu'une porte . . .* (*Trois Comédies*—Heath).
Balzac, *Eugénie Grandet* (Holt).
Sand, *La Mare au diable* (Ginn).
Henning, *XIXth Century Lyrics* (Ginn).
V. Hugo, *Notre-Dame de Paris* (Prentice Hall).
Mérimée, *Colomba* (Holt).
de Banville, *Gringoire* (Cambridge University Press).
—together with supplementary reading.

Monday, Wednesday, and Friday at 11.
Professor Conacher.

FRENCH 11. NINETEENTH CENTURY (1850-1900).

(Not offered 1931-32).

History: Michelet, *La Convention* (Nelson).

Poetry: *A short book of French Verse* [edited by Lucas] (Oxford University Press).

Drama: Rostand, *Cyrano de Bergerac* (Holt).

Fiction: Zola, *La Débâcle* (Heath).
Rolland, *Antoinette* (Ollendorf).

Ritchie and Moore, *Junior Manual of French Composition* (Cambridge University Press).

Supplementary Reading:

Hervieu, *La Course du Flambeau* (Heath).
Taine, *Hist. de la Litt. Anglaise*, t. V, ch. II, IV, VI (Hachette).
Maupassant, *Contes Choisis* (Holt).
Loti, *Pêcheur d'Islande* (Holt).

Monday, Wednesday, and Friday at 11.
Professor Conacher.

FRENCH 13. EXPLICATION DE TEXTES.

Balzac, *Le Père Goriot* (Dent).
Flaubert, *Trois Contes* (Nelson).
A. France, *Crainquebille* (Calmann Lévy).
Hervieu, *La Course du Flambeau* (Heath).
Hémon, *Maria Chapdelaine* (Macmillan).
Oxford Book of French Verse (Selections).
Moore and Ritchie, *French Prose from Calvin to A. France* (Dent).
Moore and Slight, *Intermediate French Course*, Part III (Blackie).
Ritchie and Moore, *Manual of French Composition* (Cambridge University Press).
Le Petit Larousse Illustré.

Monday, Wednesday, and Friday at 11.
Professor Tirol.

FRENCH 25. THE RENAISSANCE.

Faguet, *Le Seizième Siècle* (Boivin).
Rabelais, *Oeuvres* (Larousse).
Montaigne, *Selections* (Heath).
Chefs d'œuvre des poètes du XVI^e Siècle (Hachette).

Tuesday, Thursday, and Saturday at 9.
Professor Campbell.

FRENCH 41. HISTOIRE DE LA LITTÉRATURE FRANÇAISE.

Chateaubriand, *Extraits* (Delagrave).
V. Hugo, *Les Misérables*, Vol. I (Nelson), *Ruy Blas* (Nelson).
Balzac, *Le Cousin Pons* (Holt), *La Peau de Chagrin* (Nelson).
Fournier, *Le Grand Meaulnes* (N.R.F.)
Rouquette, *Le Grand Silence Blanc.*
Mirbeau, *Les affaires sont les affaires* (Fayard).
Oxford Book of French Verse.
Moore and Ritchie, *French Prose from Calvin to A. France.* (Dent).
Ritchie and Moore, *Manual of French Composition,* (Cambridge University Press).

Tuesday, Thursday, and Saturday at 11.
Professor Tirol.

FRENCH 99. HONOUR READING AND SEMINAR COURSE for those taking their main work in French. Students may select one of the following options or arrange with the Department some equivalent course:

Les Cathédrales françaises—Professor Campbell.
Théâtre moderne.—Professor Conacher.
La Langue française depuis la Guerre—Professor Tirol.

FRENCH 100. THE NOVEL.

Open only to candidates for M.A.

FRENCH 105. FRENCH CLASSICAL TRAGEDY.

Open only to candidates for M.A.

Professor Campbell.

FRENCH 110. OLD FRENCH.

Open only to candidates for M.A.

(*a*) Literary and Linguistic Study of *La Chanson de Roland.* The editions by G. Paris (Hachette) and T. A. Jenkins (Heath) will be used.

(b) The Problem of *Les Chansons de Geste*:
Bédier (J.), *Les Légendes épiques*, 4 vols.

Professor Campbell.

FRENCH 115. MIDDLE FRENCH.

Open only to candidates for M.A.

Professor Campbell.

SPANISH AND ITALIAN LANGUAGES AND LITERATURE

PROFESSOR—J. H. Brovedani, D-ès-L.

LECTURER—E. Rivera, B.A.

TUTORS—Margaret O'Connor,
Mary Beatty,
Emily Williams.

SPANISH

REGULATIONS

1. Spanish A may be counted towards a degree and towards Honours under conditions specified in section 16 of GENERAL REGULATIONS.

2. Spanish A is a prerequisite to Spanish 1 and Spanish 1 is a prerequisite to all other courses.

3. Students finishing with Spanish as a Major or Minor, under the old Pass Course, will take, for a Major, courses A, 1 (1, 2, for students entering with Spanish Matriculation) and three more courses; and for a Minor, courses A, 1 (1, 2, for students entering with Spanish Matriculation) and two more courses.

4. Students making Spanish one of the three main subjects under the new Pass Course will take A, 1, and 2 or 6 (with Spanish Matriculation 1, 2, and 6 or 10).

5. Honours consist of A, 1, 2, and three or four other courses. Italian 1, with the consent of the Department, may be substituted for one of the courses. When Italian 1 is counted as one of the courses in Spanish for the Honour B.A. the marks in Italian will be averaged with those of the advanced courses in Spanish and a standing of 66% over all will be required. The same applies to Spanish 2 if Spanish A is counted towards the degree.

Students making Spanish their main Honour subject must include Spanish 99. Students taking Honours in Spanish may take Spanish 12 with course 2.

6. Students in commercial courses will take A, 1, 2, or A, 1 and 6.

8. Reference Books:

DICTIONARIES: Velázquez, *English-Spanish* (Appleton), or Cuyás, *English-Spanish* (Appleton), which is less expensive. Honour students are strongly recommended to use also La Fuente, *Diccionario ilustrado*, written entirely in Spanish, and Alemany, *Diccionario de la lengua española.*

GRAMMARS: For First and Second year Students: Ramsay, ***Book of Modern Spanish.*** For advanced students: Bello-Cuervo, *Gramática Castellana* (R. Roger & F. Chernovis, Paris), one of the best Grammars written entirely in Spanish, and Pidal, *Gramática Histórica.*

PRONUNCIATION: Moreno-Lacalle, *Elements of Spanish Pronunciation* (Sanburn). Navarro-Tomás, *Pronunciación Española* (Centro Estudios Históricos, Madrid) the best work of its kind, indispensable for students taking the Specialist Course.

HISTORY OF LITERATURE: Fitzmaurice-Kelly, *History of Spanish Literature.* There is also a Spanish edition of this work with an up-to-date bibliography. Mérimée, *Histoire de la littérature espagnole* (Garnier Frères, Paris). Salcedo, *Literatura Española* (Casa Editorial Calleja, Madrid). Hurtado La Serna y González, *Historia de la literatura Española* (Madrid, 1921, also New York, Zabala and Maurin).

SPAIN AND ITS PEOPLE: Richard Ford, *The Handbook for Travellers in Spain,* London (John Murray, 8th edition, 1892. There is also an Everyman's edition of the same work entitled Ford's *Gatherings from Spain.*) George Borrow, *The Bible in Spain* (Dent), T. Gautier, *Voyage en Espagne,* E. de Amicis, *Spain and the Spaniards* (Putnam), are classics with which every student of Spanish must be acquainted. Havelock Ellis, *The Soul of Spain* (Houghton Mifflin Co.), S. L. Bensusan, *Home Life in Spain* (Macmillan), J. B. Trend, *A Picture of Modern Spain* (Houghton Mifflin Co., 1921), are good modern works on this subject.

COURSES OF INSTRUCTION

SPANISH A. ELEMENTARY SPANISH.

Grammar, Composition, Translation, Reading and oral exercises.

Prescribed texts:

Moreno-Lacalle, *Elementos de Español,* revised edition, 1930 (Sanborn), for intra-mural students only. The grammar for extra-mural students will be prescribed in the outlines.

Hills and Cano, *Cuentos y leyendas* (Heath), first term.

C. Marcial Dorado, *Segundas lecciones de español* (Ginn), second term.

Division A, *Tuesday, Thursday, and Saturday at* 9.
Division B, *Monday, Wednesday, and Friday at* 11.

SPANISH 1. INTERMEDIATE SPANISH.

Prerequisite—Spanish Matriculation, or Spanish A.

Grammar, Composition, Translation, Conversation and Study of the following prescribed texts:

Cuentos Humorísticos Españoles (Macmillan), first term.
Hills, *Spanish Tales* (Holt).
McHale, *Un Viaje a Sud America*, Parts I and II (first term).
Tres Piezas Cómicas (Heath).
Ford, *Spanish Composition* (Heath).
Monday, Wednesday, and Friday at 9.

SPANISH 2. ADVANCED SPANISH.

Prescribed texts:

Shapiro and Hurley, *Cosas de España* (Holt), first term.
Concha Espina, *Talín y otros cuentos*, (Alfred A. Knopf, New York), first term.
Martínez de la Rosa, *La Conjuración de Venecia* (Sanborn), second term.
Quintero, *Doña Clarines* (Heath), second term.
Hugo Wast, *Desierto de piedra* (Heath).
Remy, *Spanish Composition* (Heath).
Tuesday, Thursday, and Saturday at 10.

SPANISH 6. COMMERCIAL SPANISH. Prerequisite, Spanish 1.

Prescribed texts:

McHale, *Commercial Spanish* (Heath).
Whittem and Andrade, *Spanish Commercial Correspondence* (Heath).
Alonzo and Hershey, *Technical and Industrial Spanish* (Heath).
Quintero, *Doña Clarines* (Heath), second term.
Tuesday, Thursday, and Saturday at 10.

SPANISH 10. INTRODUCTORY TO HONOURS. To be taken in the same year as Spanish 2.
Benavente, Tres Comedias (Heath).
Jorge Isaacs, *María* (Heath).
Alarcón, *El sombrero de tres picos* (Holt).
Valdés, *Riverita* (Midwest Book Company).
Quinteros, *Puebla de las mujeres* (Century Company).

SPANISH 12. MODERN AUTHORS.

Prescribed texts:

Palacio Valdés, *La hermana San Sulpicio* (Ginn), first term.
César Barja, *Libros y Autores Modernos* (Rivadeneyra), Chap. XIX, first term.
Blasco Ibánez, *La Barraca* (Holt), first term.
José Echegaray, Emilia Pardo Bazán, Peréz Galdos,

César Barja, *Libros y autores Modernos* (Rivadeneyra), Chaps. XX, XXII, XXIII, XXIV, second term.
Galdós, *Doña Perfecta* (A. B. C. (Ginn), second term.
Echegaray, *O Locura o Santidad* (Heath), second term.
(Not offered in 1931-32).

Monday, Wednesday, and Friday at 10.

SPANISH 18. THE GOLDEN AGE.

Alternate years only. Offered in 1931-32.

Monday, Wednesday, and Friday at 10.

SPANISH 20. THE NOVEL FROM 1868 AND CONTEMPORARY DRAMA.

Alternate years only. Not offered in 1930-31.

Monday, Wednesday, and Friday at 10.

SPANISH 22. CERVANTES AND THE DRAMA IN THE GOLDEN AGE.

SPANISH 24. THE ROMANTIC PERIOD AND LYRIC POETRY FROM THE MIDDLE OF THE 19TH CENTURY.

SPANISH 25. MAIN CURRENTS OF SPANISH LITERATURE.

SPANISH 28. SPANISH-AMERICAN LITERATURE.

SPANISH 29. SPANISH RENAISSANCE.

SPANISH 99. READING AND SEMINAR COURSE FOR HONOUR STUDENTS.

ITALIAN

REGULATIONS

1. With the consent of the Department students taking Honours or a Major in Spanish may substitute Italian 1 for one of their lecture courses in Spanish. For standing required on the Honour Courses see regulation 5 under Spanish. This course is offered every year.

2. No extra-mural instruction is offered in Italian.

3. Spanish A and Italian 1 *may not be taken in the same year.*

COURSES OF INSTRUCTION

ITALIAN 1. ELEMENTARY ITALIAN.

Russo: *Elementary Italian Grammar* (Heath).
Oral Exercises, Dictation, Grammar, Composition.
Reading of extracts from Modern Italian authors (Bowen's Italian Reader, Heath).
Reading and translation of Castelnovo, *O bere o affogare* and Pirandello, *Lumie di Sicilia* (Ginn).
Reading of *L'Italia* by Wilkins and Marinoni (University of Chicago Press).

Tuesday, Thursday, and Saturday at 11.

ENGLISH LANGUAGE AND LITERATURE

PROFESSOR—George Herbert Clarke, M.A., D.Litt., F.R.S.C.

PROFESSOR—James Alexander Roy, M.A.

ASSOCIATE PROFESSOR—Henry Alexander, M.A.

ASSISTANT PROFESSOR—Wilhelmina Gordon, M.A.

LECTURER—Magnus H. Irvine, M.C., M.A. (on leave of absence)

LECTURER—Eric E. Duthie, M.A.

LECTURER—M. Maxwell MacOdrum, M.A., Ph.D.

READERS—Mary M. Chown, B.A., Alma Graham, M.A. (first term); Anne C. Johnson, A. C. D. Nicholson, G. W. L. Nicholson, Mary S. Sparling, B.A. (second term).

TUTORS — Ursula Brennan, B.A., Margaret Davis, M.A., Marion M. Duthie, M.A., Mary Macgillivray, B.A., Margaret Seager, B.A.

REGULATIONS

1. English 1 and 2 are required of all candidates for a degree in Arts. English 1 is a prerequisite for entrance to English 2, and for Pass students English 2 is a prerequisite for entrance to all courses numbered higher, except English 12, which should be taken during the same year as English 2.

2. Students offering English as one of the main subjects on a Pass Course under the new regulations will take English 1 2, and 3.

3. Students making English one of their two Honours subjects must take from six to ten half-courses in addition to courses 1 and 2. Their standing in English 2 and English 12 must not be below the second division or class. After the completion of English 2, courses 10a and 14b must be taken as soon as possible. In the ordinary sequence these and 18, 22a, 24b and 28 are third year courses, while 17a, 20b, 30, 33b, 35a, 36b, 40a, 41b, 43a, 44b, 45a and 46b are normally considered fourth year courses. Those who regard English as their chief Honours subject must take course 99.

COURSES OF INSTRUCTION

Note: Students in each of the following courses will be furnished with a list of recommended reference books in addition to those required.

ENGLISH 1. PROSE COMPOSITION, WITH LITERARY BACKGROUND.

A practical course in Prose Composition, with parallel reading. In the examination both knowledge of the texts and ability to write clearly and correctly will be required.

Prescribed texts:

Richard Wilson, *Thinking About English.* (London and Toronto: Thomas Nelson and Sons).

Richard Wilson, *Précis Notes, and Summaries.* (London and Toronto: Thomas Nelson & Sons).

Shakespeare, *Henry IV, Part I,* edited by W. A. Wright. (Toronto: Oxford University Press).

Modern Prose, King's Treasuries Series. (London and Toronto: J. M. Dent & Sons).

Selected English Essays, King's Treasuries Series. (London and Toronto: J. M. Dent & Sons).

Selected Short Stories, World's Classics, No. 193. (Toronto: Oxford University Press).

Representative Short Stories, edited by Amanda M. Ellis. (London and Toronto: Thomas Nelson and Sons).

In addition to the foregoing each student must possess a satisfactory English dictionary, preferably the *Concise Oxford Dictionary* (Toronto: Oxford University Press).

Section A, Section B, *Tuesday, Thursday, and Saturday at* 8.

Section C, *Tuesday, Thursday, and Saturday at* 10.

ENGLISH 2. A GENERAL INTRODUCTION TO ENGLISH LITERATURE.

This course is intended to provide a general knowledge of the history and development of English Literature, and to lay a foundation for the advanced specialized courses. It deals both with periods and with types, and seeks to encourage in the student some critical appreciation of literary values.

Prescribed texts:

Bernard Groom, *A Literary History of England* (Toronto: Longmans, Green and Company).

The World's Classics, Nos. 219-223 and Nos. 308-312, inclusive. (Toronto: Oxford University Press).

Section A, Section B, Monday, Wednesday, and Friday at 9.

Section C, Section D, Tuesday, Thursday, and Saturday at 9.

ENGLISH 3. ADVANCED PASS ENGLISH.

A study of English drama and prose fiction and of contemporary English prose and poetry.

Prescribed texts:

Plays before Shakespeare, edited by Evelyn Smith. (London and Toronto: J. M. Dent and Sons—King's Treasuries Series).

Three Elizabethan Plays, edited by J. D. Andrews and A. R. W. Smith. (London and Toronto: Thomas Nelson and Sons—The Teaching of English Series).

Shakespeare's Plays, (any complete edition).

Restoration Tragedies, and *Eighteenth Century Comedy*, Nos. 313 and 292 of The World's Classics Series, (Toronto: Oxford University Press).

The following novels, in the World's Classics Series, *Robinson Crusoe*, (No. 17), *The Vicar of Wakefield*, (No. 4), *Barchester Towers*, (No. 268). (Students will be expected to read other novels, which they may borrow from the University Library.)

The Golden Book of Modern English Poetry, edited by Thomas Caldwell. (Toronto: J. M. Dent and Sons).

Monday, Wednesday, and Friday at 11.

Professor Gordon (first term) and Professor Alexander (second term).

ENGLISH 10a. OLD ENGLISH.

Open only to Honours students.

Outlines of Old English Grammar and Literature. Translation and study of selected passages.

Prescribed text:

Krapp and Kennedy, *An Anglo-Saxon Reader*. (New York: Henry Holt and Company).

Monday, Wednesday, and Friday at 9.

Professor Alexander.

ENGLISH 12. AN INTRODUCTION TO HONOURS IN ENGLISH.

To be taken during the same year as English 2. A general study of the history of the English language, of verse-forms, and of the elementary principles of literary criticism.

Prescribed texts as in English 2, together with the following:

G. H. McKnight, *English Words and their Background* (New York: D. Appleton and Company).

A. R. Entwistle, *The Study of Poetry* (Toronto: Thomas Nelson and Sons).

E. A. Greening Lamborn, *The Rudiments of Criticism* (Toronto: Oxford University Press).

Monday, Wednesday, and Friday at 11.

Professor Alexander (first term) and Professor Gordon (second term).

ENGLISH 14b. MIDDLE ENGLISH.

A brief survey of the most important transition texts after 1100 and the main linguistic changes. A study of Chaucer's development as a poet based on a general knowledge of the following works: *The Romaunt of the Rose, Book of the Duchesse, Parlement of Foules, Troilus and Criseyde, House of Fame, Prologue to the Legend of Good Women, The Canterbury Tales.* Students must acquire a detailed knowledge of the *Prologue to the Canterbury Tales, The Nun's Priest's Tale, The Pardoner's Tale,* and *The Prioress's Tale.*

Open only to Honours students.

Prescribed texts:

The Works of Chaucer. (Toronto: Oxford University Press).

The Nun's Priest's Tale, edited by K. Sisam. (Toronto: Oxford University Press).

Grace Hadow, *Chaucer and his Times,* Home University Library. (New York: Henry Holt and Company).

Monday, Wednesday, and Friday at 9.

Professor Alexander.

ENGLISH 17a. ENGLISH PROSODY.

A critical consideration of the principles and practice of English versification, with a special study of the development of the more familiar verse-forms.

Prescribed texts:

George Saintsbury, *A Manual of English Prosody.* (London and Toronto: The Macmillan Company).

The Oxford Book of English Verse (Toronto: Oxford University Press).

Tuesday, Thursday, and Saturday at 11.

Professor Clarke.

ENGLISH 18. SHAKESPEARE.

A review of the environment and life of Shakespeare, and of his development as a dramatist, with lectures on the lives and works of his chief forerunners and contemporaries. In the study of Shakespeare's works his chief comedies will be first considered, and thereafter his tragedies and last plays.

Prescribed texts:

J. W. MacKail: *The Approach to Shakespeare..* (Toronto: Oxford University Press).

J. Q. Adams, *The Life of William Shakespeare,* Student's edition. (Boston: Houghton Mifflin Company).

Shakespeare's Comedies; Shakespeare's Historical Plays; *Shakespeare's Tragedies*, Everyman edition. (Toronto: J. M. Dent & Sons).

A. C. Bradley, *Shakespearean Tragedy*. (New York and Toronto: The Macmillan Company).

Monday, Wednesday, and Friday at 10.

Professor Clarke.

ENGLISH 20b. SPENSER AND MILTON.

This course is concerned chiefly with the poetry of Spenser and of Milton, but it includes also a study of the Elizabethan and Seventeenth Century lyric and of some prose criticism.
Open only to students who have taken English 18 or History 18. This course is given alternately with English 41b. Offered in 1931-1932, but not in 1932-1933, save extra-murally.

Prescribed texts:

Edmund Spenser, *Poems*. (Any edition, preferably that published by the Oxford University Press).

John Milton, *Poems*. (Any edition, preferably that published by the Oxford University Press).

John Milton, *Areopagitica*. (Toronto: Oxford University Press).

Any anthology of English verse (such as the *Oxford Book of English Verse*.

Metaphysical Lyrics and Poems of the Seventeenth Century, edited by H. J. C. Grierson. (Toronto: Oxford University Press).

Recommended for extra-mural students: *A Milton Handbook*, by J. H. Handford (New York: F. S. Crofts and Company); *Selected Essays of John Milton*, edited by Laura E. Lockwood (Boston: Houghton Mifflin Company).

Tuesday, Thursday, and Saturday at 10.

Professor Gordon.

ENGLISH 22a. THE EIGHTEENTH CENTURY.

The chief literary movements from 1660 to 1786 will be studied. Attention will be given to the work of the following authors: Dryden, Pope, Prior, Gay, Johnson; Thomson, Collins, Gray, Cowper, Burns; Swift, Addison, Steele; Defoe, Richardson, Fielding, Sterne, Goldsmith; Lady Mary Wortley Montague, Horace Walpole, Chesterfield; Gibbon, Burke, Boswell.

Prescribed texts:

O. Smeaton, *English Satires* (Toronto: Blackie and Son).

John Bailey, *A Shorter Boswell.* (Toronto: Thomas Nelson and Sons).

Guy Boas, *Gray, Collins, Goldsmith and Cowper* (Toronto: Thomas Nelson and Sons).

Sir Leslie Stephen, *English Literature and Society in the Eighteenth Century.* (London: Duckworth).

Dryden, *Poems.* (Oxford edition).

Pope, *Poems* (Globe edition). (New York and Toronto: The Macmillan Company).

W. C. Hazlitt, *Lectures on the English Poets,* Everyman edition. (Toronto: J. M. Dent & Sons).

Tuesday, Thursday, and Saturday at 9.

Professor Roy.

ENGLISH 24b. THE ROMANTIC REVIVAL.

The works of such representative authors as the following will be studied: Wordsworth, Coleridge, Southey; Scott; Crabbe; Byron, Keats, Shelley; Landor; Moore, Campbell; Hazlitt, Lamb, De Quincey.

Prescribed texts:

English Critical Essays of the Nineteenth Century. (Toronto: Oxford University Press).

Ernest Bernbaum, *Guide Through the Romantic Movement,* Vol. I, (Toronto: Thomas Nelson and Sons).

Guy Boas, *Wordsworth and Coleridge Contrasted.* (Toronto: Thomas Nelson and Sons).

Guy Boas, *Keats and Shelley Contrasted.* (Toronto: Thomas Nelson and Sons.

H. N. Brailsford, *Shelley, Godwin and their Circle,* Home University Library. (New York: Henry Holt and Company).

W. C. Hazlitt, *The Spirit of the Age,* Everyman edition. (Toronto: J. M. Dent & Sons).

William Wordsworth, *Poems.* (Oxford edition).

Any editions of the Poetical Works of Coleridge, Scott, Byron, Shelley and Keats.

Tuesday, Thursday, and Saturday at 9.

Professor Roy.

ENGLISH 28. THE VICTORIAN ERA.

A study of the chief trends of thought and experience during the Nineteenth Century, as exemplified in the works of the greater prose masters and poets of the Victorian Era. Offered in 1931-1932, but not in 1932-1933.

Prescribed texts:

The World's Classics, Nos. 19, 146, 153, 223. (Toronto: Oxford University Press).

Everyman Series, Nos. 225, 458, 723, 765. (Toronto: J. M. Dent and Sons).

Sir A. Quiller-Couch, *The Oxford Book of Victorian Verse*. (Toronto: Oxford University Press).

Any editions of the Poetical Works of Tennyson, Clough, Arnold, Browning, Rossetti and Swinburne.

For reference: Hugh Walker, *The Literature of the Victorian Era*. (Toronto: Cambridge University Press).

Tuesday, Thursday, and Saturday at 11.

Professor Gordon (first term) and Professor Clarke (second term).

ENGLISH 30. TWENTIETH CENTURY LITERATURE.

A study of recent literary tendencies, particularly in modern poetry, as exemplified in the poetic works of Hardy, Masefield, Bridges, Phillips, Watson, Kipling, De la Mare, and others.
Open only to students who have taken English 28. This course is given alternately with English 35a and 36b. Offered in 1932-1933, but not in 1931-1932.

Monday, Wednesday, and Friday at 11.
Professor Clarke.

ENGLISH 33b. THE POETRY OF ROBERT BROWNING.

An intensive study of Browning's chief dramatic monologues, dramas, and *The Ring and the Book*.
Offered in 1932-1933, but not in 1931-1932.

Tuesday, Thursday, and Saturday at 11.
Professor Clarke.

ENGLISH 35a. AMERICAN LITERATURE.

This course rapidly surveys the field indicated, emphasizing the work of Irving, Cooper, Bryant, Poe, Emerson, Hawthorne, Lanier, Whitman, Mark Twain, Henry James, and other writers. Offered in 1931-1932, but not in 1932-1933.

Prescribed texts:

W. C. Bronson, *A Short History of American Literature.* (Boston: D. C. Heath and Company).

Norman Foerster, *American Poetry and Prose.* (Boston: Houghton Mifflin Company).

H. S. Canby and W. R. Benét, *American Poetry since 1900.* (Boston: Houghton Mifflin Company).

Monday, Wednesday, and Friday at 11.
Professor Clarke.

ENGLISH 36b. CANADIAN LITERATURE.

This course surveys the field of Canadian Literature, historically and critically. Offered in 1931-1932, but not in 1932-1933.
Prescribed texts:

Ray P. Baker, *A History of English-Canadian Literature to the Confederation.* (Cambridge: Harvard University Press).

V. B. Rhodenizer: *A Handbook of Canadian Literature* (Ottawa: Graphic Publishers).

Raymond Knister, *Canadian Short Stories.* (Toronto: The Macmillan Company).

Hugh Eayrs, *Modern Canadian Poets.* (Toronto: The Macmillan Company).

E. K. and E. H. Broadus, *A Book of Canadian Prose and Verse.* (Toronto: The Macmillan Company).

Monday, Wednesday, and Friday at 11.
Professor Clarke.

ENGLISH 40a. THE EARLIER ENGLISH NOVEL.

A history of the development of the English novel to the middle of the Nineteenth Century.
Open only to students who have taken English 22a.
Offered in 1932-1933, but not in 1931-1932.

Tuesday, Thursday, and Saturday at 10.
Professor Gordon.

ENGLISH 41b. THE LATER ENGLISH NOVEL, AND THE SHORT STORY.

A study of the English Novel and the Short Story of the later Nineteenth Century and the Twentieth Century.
Open only to students who have taken English 40a. This course is given alternately with English 20b. Offered in 1932-1933, but not in 1931-1932.

Tuesday, Thursday, and Saturday at 10.
Professor Gordon.

ENGLISH 43a. MODERN EUROPEAN DRAMA.

A consideration of the work and influence of such representative writers as Ibsen, Björnsen; Strindberg; Hervieu, Brieux, Rostand; Maeterlinck, Verhaeren; Heijermans; Tolstoi, Gorky, Chekhov, Andreyev; Hauptmann, Sudermann, Wedekind, Toller, Kaiser; Bahr, Schnitzler, von Hofmannsthal; Molnar; D'Annunzio, Pirandello; Echegaray, Benavente, Guimara.
This course is given alternately with 45a. Offered in 1932-1933, but not in 1931-1932.

Monday, Wednesday, and Friday at 10.
Professor Roy.

ENGLISH 44b. MODERN ENGLISH DRAMA.

A study of the development of English drama from the Victorian Era until the present. The work and influence of the following dramatists will be considered: Knowles, Bulwer-Lytton, T. W. Robertson; Pinero, Jones, Wilde, Shaw, Galsworthy, Barker; Phillips; Hankin, Masefield, Houghton, Maugham; Barrie; Yeats, Synge, Lady Gregory, Moore, Dunsany, Ervine.
This course is given alternately with 46b. Offered in 1932-1933, but not in 1931-1932. Open only to students who have taken English 43a.

Monday, Wednesday, and Friday at 10.
Professor Roy.

ENGLISH 45a. RESTORATION AND EIGHTEENTH CENTURY DRAMA.

This course is given alternately with English 43a. Offered in 1931-1932, but not in 1932-1933.

Prescribed texts:

Plays of the Restoration and Eighteenth Century, edited by D. Macmillan and H. W. Jones. (New York: Henry Holt and Company).

G. H. Nettleton, *English Drama of the Restoration and Eighteenth Century*. (Nev York and Toronto: The Macmillan Company).

Monday, Wednesday, and Friday at 10.
Professor Roy.

ENGLISH 46b. THE ENGLISH ESSAY.

This course is given alternately with English 44b. Offered in 1931-1932, but not in 1932-1933.

Prescribed texts:

J. H. Lobban, *English Essays.* (London: Blackie & Son).
Sir Henry Newbolt, *Essays and Essayists.* (London and Toronto: Thomas Nelson and Sons).
Hugh Walker, *The English Essay and Essayists* (London and Toronto: J. M. Dent and Sons).
Century Readings in the English Essay. (New York: The Century Company).

Monday, Wednesday, and Friday at 10.
Professor Roy.

ENGLISH 99. READING COURSE AND SEMINAR FOR HONOURS STUDENTS.

Seminars in the subjects indicated below, consisting ordinarily of about twelve meetings of three hours each during the academic year, will be arranged at suitable hours and dates. A large amount of reading and some independent investigation are required of each student, and the results of such work must be communicated to the seminar in the form of reports or essays. This course must be taken during the student's final year.

SEMINARS

(1) BEOWULF.

Open only to students who have taken English 10a.
Professor Alexander.

(2) ELIZABETHAN DRAMA OTHER THAN SHAKESPEARE.

Open only to students who have taken English 18.
Professor Gordon.

(3) SHELLEY AND KEATS.

Open only to students who have taken English 22a and 24b.
Professor Clarke.

(4) DICKENS AND THACKERAY.

Open only to students who have taken English 28 or 40a.
Professor Roy.

HISTORY

Professor of History and Douglas Professor of Canadian and Colonial History—Duncan McArthur, M.A., F.R.S.C.

Associate Professor—Reginald G. Trotter, M.A., Ph.D.

Associate Professor—A. E. Prince, M.A., B.Litt.

Associate Professor—Norman McL. Rogers, M.A., B.Litt., B.C.L.

Lecturer—Hartley Thomas, M.A.

Sir James Aikins Fellow—A. D. Lockhart, B.A.

Tutors—Ross Winter, M.A.
T. D. Walter.
Anna Faust.

Regulations

1. All students proceeding to advanced work in History must take any two courses from History 1, 2, and 3. History 3 should be chosen if History 13 is included.

2. A student selecting History as one of his special subjects for a pass degree under the new regulations will take History 1, 2, and 3.

3. Candidates for Honours will ordinarily select one of the following options according as they emphasize Canadian or European History:

A. History 2, 3, 13, and from two to four other courses approved by the Department.

B. History 1, 2, 16, and from two to four other courses approved by the Department.

4. Any half-courses in the department of Economics which deal with economic history or constitutional law and practice may be counted as half-courses in History. But in all such cases, the student will consult the Professor of History.

5. A knowledge of historical geography is required in all classes. The most accessible atlases are:

Ramsay Muir, *Phillips' New Historical Atlas for Students* (Geo. Philips & Son).

C. Grant Robertson and J. G. Bartholomew, *An Historical Atlas of Modern Europe from 1789-1922.* (Oxford).

The Everyman Literary and Historical Atlases of Europe, America, Asia, Africa and Australasia (Dent).

E. W. Dow, *Atlas of European History* (Holt & Co.).

F. W. Putzger, *Historischer Schul-Atlas* (Leipsig).

W. R. Shepherd, *Historical Atlas* (Holt & Co.).

Burpee, *Historical Atlas of Canada* (Nelson)

History 1. European History from the Renaissance to the Congress of Vienna—1453-1815.

The following subjects will be discussed in the lectures: Development of Nation-States; Italian and trans-Alpine Renaissance; the Spread of the Reformation and the Catholic Reformation; the Religious Wars; Age of Louis XIV; the Evolution of Prussia; the Rise of Russia; the Enlightenment and the Enlightened Despots; the French Revolution;the NapoleonicEra.

Hayes, *Political and Social History of Modern Europe*, Vol. I. (Macmillan). (1931-32).

W. H. Hudson, *Story of the Renaissance* (Cassell).

Fisher, *Napoleon* (Home University Library, Williams and Norgate).

For extra-mural students the following books are also required:

H. L. Hoskins, *Outline of Modern European History* (Doubleday, Page).

W. C. Abbott, *Expansion of Europe* (Holt).

Tuesday, Thursday, and Saturday at 11. Professor Prince.

HISTORY 2. BRITISH HISTORY SINCE 1714.

The lectures will deal with such topics as the following: The Hanoverian succession as the corollary of the Revolution of 1688; the development of party government and the cabinet; Imperial expansion and dismemberment; eclipse of the Whigs; the French Revolution and domestic reaction; the Industrial and Social Revolutions; the democratization of the constitution; the growth and government of the new Empire; Ireland; Britain and the Powers in the nineteenth century; the Empire in the World War; problems of peace and reconstruction.

T. F. Tout, *Advanced History of Great Britain*, Part III (Longmans). (1931-32).

A. S. Turberville, *English Men and Manners in the Eighteenth Century* (Oxford Press). (1931-32).

G. M. Trevelyan, *British History in the Nineteenth Century* (Longmans). (1931-32).

For extra-mural students the following books are also required:

W. T. Morgon, *A Guide to the Study of English History* (Knopf).

M. D. George, *English Social Life in the Eighteenth Century* (Macmillan). (1931-32).

G. G. Andrews, *Parliamentary Reform in England*, 1830-1832, (Crofts). (1931-32).

E. Rhys, editor, *The Growth of Political Liberty: A Source Book of English History*, (Everyman's Library: Dent). (1931-32).

Tuesday, Thursday, and Saturday at 8. Professor Trotter.

HISTORY 3. COLONIAL HISTORY.

Lectures will be given on the general course of Colonial Development down to 1783. These will treat of the trade routes of the Old World; the voyages of discovery; the growth of theories of colonization; Spain, France, and England in America, and the reaction of the new world upon the old; the Old Colonial system and its breakdown after the Seven Years' War; the American Revolution. Some of the more significant phases of the history of Canada to 1841 will be discussed.

Cheyney, *European Background of American History.*

Bourne, *Spain in America.*

Becker, *Beginnings of the American People.*

Tyler, *England in America* (Harpers).

McArthur, *History of Canada* (Gage).

For extra-mural students the following books are also required:

Andrews, *Colonial Self-Government*, and Howard, *Preliminaries of the Revolution*, both in *The American Nation Series* (Harpers).

Monday, Wednesday, and Friday at 11. Professor McArthur.

HISTORY 12. MEDIAEVAL EUROPEAN HISTORY, 300-1453.

The following subjects will be discussed in the lectures:—The Decline of Roman Civilization and Government in the West; the Barbarian Invasions; the Germanic Kingdoms; Monasticism, the Papacy, and the Expansion of the Church; the Rise of the Frankish Empire; the New Invaders—Norsemen, Magyars, Saracens; the Holy Roman Empire; the Capetian Monarchy; Cluny, Hildebrand, and the Investiture Controversy; Feudalism, Chivalry, the Crusades; the Hundred Years' War; Towns and Economic Development; the Universities, the Friars, the Scholastics; the Conciliar Movement; Mediaeval Architecture.

H. W. C. Davis, *Mediaeval Europe* (Home University Library).

D. C. Munro and R. J. Sontag, *The Middle Ages*, 395-1500. (Century). (1930-31).

Thatcher and McNeal, *Source Book of Medieval History* (Scribners), or R. Y. D. Laffan, *Select Documents of European History*, vol. I, 800-1492 (Methuen).

For extra-mural students the following text is also required:

J. Bryce, *Holy Roman Empire* (Macmillan).

Monday, Wednesday, and Friday at 9. Professor Prince.

HISTORY 13. THE DEVELOPMENT OF BRITISH COLONIAL POLICY

The following subjects will be discussed in the lectures: The causes of early overseas settlement; the relation of the colonies to the crown and parliament; the colonial policy of Cromwell; the restoration and extension of royal government; the revolution of 1688 and colonial policy; the governor and colonial assemblies; the causes of the loss of the American colonies; the influence of the American situation on British colonial policy; the Industrial Revolution and emigration; settlement in Australia and New Zealand; Gibbon Wakefield; the problem of colonial self-government in the West Indies, Canada, Australia, New Zealand, and South Africa; the expansion of the Empire; the Empire and British foreign policy; India, Egypt and the Near East; the government of the Empire; the Colonial and Imperial Conferences, the League of Nations and the Empire; The Imperial Conference of 1926.

Texts:

Robinson, *The Development of the British Empire* (Houghton Mifflin).

H. E. Egerton, *A Short History of British Colonial Policy* (Methuen).

G. L. Beer, *The Origins of the British Colonial System*, 1578-1660 (Macmillan).
The Old Colonial System (Macmillan).
British Colonial Policy, 1754-1765 (Macmillan).

H. E. Egerton, *The American Revolution* (Oxford).

A. B. Keith, *Selected Speeches and Documents on British Colonial Policy*, 1763-1917 (Oxford).

H. E. Egerton, *British Colonial Policy in the Twentieth Century* (Methuen).

Books of Reference:

The Cambridge History of the British Empire.
Monday, Wednesday, and Friday at 10. Professor McArthur.

HISTORY 14a. EUROPE SINCE 1815.

The lectures will deal with such topics as the following: The heritage of the French Revolution; the "Confederation of Europe"; the Metternich System; the Industrial Revolution; liberal and republican movements; the second French Empire; the unification of Italy; the unification of Germany and the Franco-Prussian War; the extension of Russia; the Near Eastern Question and the Con-

gress of Berlin; Imperial Germany; the third French Republic; Austria and Russia at the end of the century; Great Britain's rôle in nineteenth century Europe; the "Expansion of Europe"; international rivalries and the Balance of Power in the Concert of Europe; the Great War and the new nations; the League of Nations.

A. J. Grant and Harold Temperley, *Europe in the Nineteenth Century* (new edition, 1929—Longmans). (1931-32).

P. W. Slosson, *Twentieth Century Europe* (Houghton Mifflin). (1931-32).

J. F. Scott and A. Baltzly, *Readings in European History since* 1814. (Crofts). (1931-32).

For extra-mural students the following books are also required:

H. L. Hoskins, *An Outline of Modern European History* (Doubleday, Page and Co.). (1931-32).

A. Oakes and R. B. Mowat, *The Great European Treaties of the Nineteenth Century* (Oxford Press). (1931-32).

Monday, Wednesday, and Friday at 11. Professor Trotter.

HISTORY 15b. THE NEAR EASTERN QUESTION.

A study in the relations between the Occident and Orient, Christianity and Islam. The topics discussed will include the following: the Byzantine Empire and its eclipse by the Turks; Europe's peril from the Ottoman, and the "crusades" of Spain, Austria and Russia; the dismemberment of Turkey by Balkan nationalism; the Congress of Berlin; German imperialism and the "Young Turks"; the Balkan Wars; Turkey and the Great War; the Arab revival; Zionism and Palestine; the Kemal "Nationalist" movement and Lausanne; the rebirth of Turkey; the revolt of Islam against Western European control.

J. A. R. Marriott, *The Eastern Question* (Oxford University Press).

A. J. Toynbee and K. P. Kirkwood, *Turkey* (Scribners). (1931-32).

Monday, Wednesday, and Friday at 11. Professor Prince.

HISTORY 16. MEDIAEVAL ENGLISH HISTORY.

An introductory study of the development of England and English institutions up to 1485. The topics discussed will include the following: Early invaders; the Romans in Britain; the Teutonic conquest and settlement; the origins and growth of the Anglo-Saxon constitution; the Danes and Alfred the Great; the Norman Conquest; Church and State; Feudal institutions; the rise of Parliament; the development of the administrative system; Edwardian wars against Scotland and France; the Lancastrian Constitutional experiment; the Lollards; the Wars of the Roses; social England in the later Middle Ages.

T. F. Tout, *Advanced History of Great Britain, Pt. I.* (1931-32).
G. B. Adams, *Constitutional History of England* (Holt), *or*
T. P. Taswell-Langmead, *English Constitutional History, or*
D. J. Medley, *Student's Manual of English Constitutional History.*
G. B. Adams and H. M.. Stephens, *Select Documents of English Constitutional History* (Macmillan). (1931-32).

For extra-mural students the following books are also required:

W. T. Morgan, *A Guide to the Study of English History* (Knopf).
C. Petit-Dutaillis, *Studies Supplementary to Stubbs' Constitutional History*, Vol. I (Manchester).

Tuesday, Thursday, and Saturday at 9. Professor Prince.

HISTORY 18a. ENGLAND UNDER THE TUDORS, 1485-1603.

The following subjects will be discussed in the lectures: The nature of the Tudor "popular absolutism"; Henry VII and the establishment of strong government; the New Learning and the Oxford Reformers; Henry VIII and the revolt from Rome; the Protestant Reformation under Edward VI; the restoration of Catholicism under Mary; Elizabeth's ecclesiastical "middle way"; Elizabeth as a diplomatist; Elizabeth and Mary Queen of Scots and the Catholic Revival; the Tudor navy and maritime activity; Philip II and the Spanish Armada; commercial and colonial enterprise; social and economic progress at home; the Irish problem under the later Tudors; the "Age of Shakespeare"; the beginnings of Puritanism and parliamentary resistance to autocracy.

H. A. L. Fisher, *Political History of England*, 1485-1547 Longmans). (1931-32).
A. F. Pollard, *Political History of England*, 1547-1603 (Longmans). (1931-32).
G. B. Adams and H. M. Stephens, *Select Documents of English Constitutional History* (Macmillan). (1931-32).

R. B. Morgan, *Readings in English Social History*, Vol. III,1485-1603 (Cambridge University Press). (1931-32).

For extra-mural students the following books are also required:

W. T. Morgan, *A Guide to the Study of English History* (Knopf). (1931-32).

T. F. Tout, *Advanced History of Great Britain*, Part II Longmans). (1931-32)

G. B. Adams, *Constitutional History of England* (Holt). (1931-32).

F. W. Tickner, *A Social and Industrial History of England* (Arnold in England, Longmans in Canada). (1931-32).

Tuesday, Thursday, and Saturday at 9. Professor Trotter.

HISTORY 19b. ENGLAND UNDER THE STUARTS. 1603-1714.

The following subjects will be discussed in the lectures: constitution and nation at the beginning of the seventeenth century; the clash of King and Parliament; the personal rule of Charles I; the Puritan Revolution and the republican experiment under Cromwell; the Stuart Restoration and the Whig Revolution of 1688; the rise of political parties; overseas expansion under the Stuarts; social and cultural aspects of the period.

G. M. Trevelyan, *England under the Stuarts* (Methuen).

Sir Charles Firth, *Oliver Cromwell and the Rule of the Puritans in England* (Putnam).

G. B. Adams and H. M. Stephens, *Select Documents of English Constitutional History* (Macmillan). (1931-32).

R. B. Morgan, *Readings in English Social History*, Vol. IV, 1603-1688 (Cambridge University Press). (1931-32).

For extra-mural students the following books are also required:

W. T. Morgan, *A Guide to the Study of English History* (Knopf). (1931-32).

T. F. Tout, *Advanced History of Great Britain*, Part II Longmans). (1931-32)

G. B. Adams, *Constitutional History of England* (Holt). (1931-32).

F. W. Tickner, *A Social and Industrial History of England* (1931-32).

Tuesday, Thursday, and Saturday at 9. Professor Trotter.

HISTORY 20a. THE BASIS OF FRENCH CANADIAN NATIONALITY: a study of French civilization in Canada in the seventeenth and eighteenth centuries.

This class will deal with: The French institutions in Church and State transferred to Canada in the 17th century; the Jesuit missions; Laval, and the Roman Catholic Church in Canada; Louis XIV and the colonial policy of Colbert; Talon and Royal control; French feudalism in Canada; the fur trade in relation to the expansion of New France; La Salle and western exploration; the relations between New France and New England; the conflict of interest of France and England in America; the Seven Years' War in America.

The Cambridge History of the British Empire, Vol. VI (Canada), Cambridge University Press.

Munro, *The Seignioral System in Canada.*

Parkman, *The Pioneers of France in the New World; The Jesuits in North America; The Old Régime; Count Frontenac; La Salle; A Half Century of Conflict; Montcalm and Wolfe.*

And contemporary sources to be assigned in class.

Books of reference on French History (1600-1763):

Grant, *The French Monarchy.*
Lavisse, *Histoire de France*, tomes 6-8.
Lodge, *Richelieu.*
Cambridge Modern History, vol. 5, The Age of Louis XIV.
Tuesday, Thursday, and Saturday at 10. Professor McArthur.

HISTORY 21b. FRENCH AND BRITISH IN CANADA—THE FIRST PHASE, 1760-1812.

This class will deal with: The first days of British rule; the administrations of Murray and Dorchester; the Quebec Act; Canada and the American War; the United Empire Loyalists, their settlement and influence on Canadian development; the Constitutional Act and the division of the Province; Parliamentary institutions in Lower and Upper Canada; the war of 1812.

The Cambridge History of the British Empire, Vol. VI (Canada), Cambridge University Press.

Lucas, *A History of Canada*, 1763-1812.

Shortt and Doughty, *Documents relating to the Constitutional History of Canada*, 1759-91.

Doughty and McArthur, *Documents relating to the Constitutional History of Canada*, 1791-1818.

Chapais, *Cours d'histoire du Canada.*

Books of reference:

Canada and Its Provinces, vol. 3.
Bradley, *Lord Dorchester.*
Tuesday, Thursday, and Saturday at 10. Professor McArthur.

History 25. United States History.

A survey course covering the national period. Emphasis is placed upon constitutional development and such other phases of the growth as help to explain the political and social problems of the present. The following leading national themes are stressed: The structure of the government, foreign relations, the growth of national feeling, the Monroe Doctrine, westward extension, the slavery question, the Civil War, Reconstruction, financial problems, political reforms, labor and capital, the growth and regulation of corporations, the Spanish-American War and territorial expansion, the United States and the World War, the United States since the war.

Hockett and Schlesinger, *Political and Social History of the United States* (Macmillan).
Macdonald, *Documentary Source Book of American History*, 1606-1926 (Macmillan).
Tuesday, Thursday, and Saturday at 11. Professor Rogers.

History 30a. The Struggle for Responsible Government in Canada, 1812-1849.

This is an advanced course and may be offered as part of the work for the degree of M.A. The lectures and seminars will deal with the following subjects: The social and economic causes of discontent; Robert Gourlay; self-government in the Maritime Provinces; early investigations and proposals of reform; the Constitutional Party; Mackenzie and Papineau; the Rebellion of 1837; the Durham Mission and Report; the Union of the Canadas; Sydenham and reconstruction; liberalism and reaction as represented by Bagot and Metcalfe; the work of Lord Elgin; British policy; the Rebellion Losses Bill and the adoption of the practice of Responsible Government.

Doughty and McArthur, *Documents relating to the Constitutional History of Canada*, 1791-1818.
Lucas, *Lord Durham's Report*, Vols. I and II.
The lives of Mackenzie, Papineau, Baldwin, Lafontaine, Wilmot, Tilley, Hincks, Sydenham, and Elgin in *The Makers of Canada.*

Morison, *British Supremacy and Canadian Self Government* (Gundy),

and other contemporary sources to be assigned during the course.

Tuesday, Thursday, and Saturday at 11. Professor McArthur.

HISTORY 31b. CANADIAN DEVELOPMENT, SINCE 1849.

The development of party government; economic conditions; Reciprocity with the United States; Canada and the American Civil War; the Confederation Movement—its origin and development; the Canadian Confederation; the problems of the Dominion; Western expansion; railway development; the National Policy; Provincial rights; the rise of Laurier; immigration and expansion; Imperial problems; Canada and the Colonial and Imperial Conferences; the Great War and its influence on Canadian status and development.

This course is open only to honours and graduate students except by special permission of the instructor. It is conducted as a seminar, attention being given to the problem of historical method and to the bibliography of Canadian history for the period studied, and each student presenting to the class reports on special topics based so far as possible upon intensive research in the contemporary sources. In addition to the research on their special topics students are expected to make themselves familiar with the general history of the period, for which purpose they will read with special care the prescribed texts. For such other reading as opportunity affords they are advised to refer specially to such works as those listed below as books of reference.

Required texts:

R. G. Trotter, *Canadian History: A Syllabus and Guide to Reading* (Macmillan).

R. G. Trotter, *Canadian Federation: Its Origins and Achievement* (Dent).

O. D. Skelton, *Life and Letters of Sir Wilfrid Laurier* (Gundy).

Books of reference:

Cambridge History of the British Empire, vol. VI.

J. Pope, *Memoirs of Sir John A. Macdonald.*

O. D. Skelton, *Life and Times of Sir A. T. Galt.*

Isabel Skelton, *Life of Thomas D'Arcy McGee.*

Lives of men of the period in *The Makers of Canada.*

Tuesday, Thursday, and Saturday at 11. Professor Trotter.

History 40a. Canadian Constitutional History, 1760-1867.

The sources of the constitutions of the older Canadian provinces in the law and custom of the constitution of the Atlantic coast colonies; a consideration of the powers of the governor and council in Nova Scotia and Quebec; the introduction of representative government; the functions of the executive council, legislative council and legislative assembly and the relations between these bodies; the introduction of the practise of parliamentary government; the evolution of the cabinet; party organization in relation to government; change in the position of governor; changes in the constitution of the legislative councils; the powers and mode of operation of the provincial governments at the time of Confederation.

This class will probably be conducted as a seminar at an hour to be arranged at the beginning of the session.

Books of reference:

Shortt and Doughty, *Documents relating to the Constitutional History of Canada*, 1759-1791.

Doughty and McArthur, *Documents relating to the Constitutional History of Canada*, 1791-1818.

Kennedy, *Documents of the Canadian Constitution*, 1759-1915.

Saunders, *Three Premiers of Nova Scotia.*

Confederation Debates, and other source materials to be assigned.

Monday, Wednesday, and Friday at 8.
Professor Rogers.

History 41b. See Economics 35b.

Professor Rogers.

History 91. Reading Courses in Selected Periods in English History.

Students admitted to Honours may offer *one* of the following courses of prescribed reading. No lectures are offered in these courses but the student will meet with the instructor for conference at regular intervals to be arranged.

A. Fourteenth Century England.

This is a course of reading designed to illustrate social, economic, religious, and political life in England in the fourteenth century and will include

Selections from the works of William Langland, (*Piers the Plowman*, and *Richard the Redeless*).

John Gower, *Confessio Amantis.*
Lawrence Minot, *Poems.*
Geoffrey Chaucer, *Canterbury Tales.*

These contemporary authors will be supplemented by

Dorothy Hughes, *Illustrations of Chaucer's England.*
G. C. Coulton, *Chaucer's England.*
J. Jusserand *English Yayfaring Life in the Fourteenth Century.*
G. M. Trevelyan, *England in the Age of Wycliffe.*

Professor Prince.

B. THE ENGLAND OF GEORGE THE THIRD.

A course of reading in the social, political and economic life of the late 18th and early 19th centuries based on contemporary materials.

Students will read prescribed sections of

The Correspondence of George the Third.
The Correspondence of the Earl of Chatham.
The Memoirs of the Marquis of Rockingham.
The Grenville Papers.
Fitzmaurice, *Life of the Earl of Shelburne.*
The Correspondence of the Duke of Bedford.
The Letters of Horace Walpole.
Horace Walpole's Memoirs of the Reign of King George the Third.
The Letters of Junius.
The speeches of Burke and Fox and the letters and narratives of Arthur Young.

Professor McArthur.

C. MID-VICTORIAN ENGLAND.

A course of reading in phases of mid-Victorian politics as revealed in notable biographies and memoirs such as the following:—

Morley, *Life of Gladstone.*
Monypenny and Buckle, *Life of Disraeli.*
Maurois, *Disraeli.*
Walpole, *Life of Lord John Russell.*
Correspondence of Lord John Russell.
Lee, *Queen Victoria.*
Strachey, *Queen Victoria.*
The Letters of Queen Victoria.

Professor Trotter.

POLITICAL AND ECONOMIC SCIENCE

PROFESSOR—W. A. Mackintosh, M.A., Ph.D.
ASSOCIATE PROFESSOR—C. E. Walker, B.Sc.Acc., C.A.
ASSOCIATE PROFESSOR—R. G. H. Smails, B.Sc.(Econ.), A.C.A.
ASSOCIATE PROFESSOR—C. A. Curtis, B.A., Ph.D.
ASSOCIATE PROFESSOR—N. McL. Rogers, M.A., B.Litt., B.C.L.
ASSISTANT PROFESSOR—F. A. Knox, B.A.
LECTURER—H. F. Sutherland, M.A.
LECTURER—J. Aitkin, B.A., M.B.A.
TUTOR—R. O. Merriman, M.A.

REGULATIONS

1. Students taking only one course in this subject must choose either Economics 1 or Economics 2; it is not necessary to take Economics 1 before Economics 2. Students taking two courses should select them from Economics 1, 2, and 4.

2. Students choosing Economics as one of their main subjects on the new Pass Course must take Economics 1, 2, and 4.

3. Students seeking Honours in this subject are required to take from five to seven full courses or their equivalent, including Economics 1 and 2, 10 or 30, and one of the following groups: (*a*) 32, 33 or 35; (*b*) 25, 15 or 16, 23 or 24. Those making Economics their main subject must include a course numbered 90 or over.

4. Students seeking Honours must obtain at least Division 2 standing in Economics 1 or 2.

5. For requirements for the B.Com. degree, consult the special announcement of the courses in Commerce and Administration.

6. Courses 1, 2, 4, 10, 30, 32 and 39 are whole courses, running throughout the year; all others are ordinarily given as semester or half-courses, though certain related courses may be required to be taken in sequence.

Courses 1-9 are introductory; 1 and 2 are fundamental for both Pass and Honour students; courses 3 to 9 are not open to Honour students. Courses 10 to 29 deal with economic and 30 to 49 with political and social questions; 50 to 69 are Commerce and Administration courses. Students in Arts may not choose more than two half-courses from the subjects numbered 50-63 as they appear in this Calendar. A list of the courses to be offered in this and succeeding years follows:

1. Introduction to Economics.
2. Introduction to Politics.
4. Descriptive Economics.
5. Principles of Economics.
10. Economic Theory.
12. Socialism and Relation of the State to Industry.
13. Labor Problems.
15. Economic History, United Kingdom and Europe.
16. Economic History, Canada and the United States.
19. Statistical Theory and Method.
20. Competition and Monopoly.
21. Economics of Transportation.
22. Economics of Agriculture.
23. International Trade and Tariff Policy.
24. Public Finance and Taxation.
25. Money and Banking.
28. Advanced Banking.
30. Political Theory since 1800.
32. International Law and Organization.
34. Imperial Problems and Political Parties.
35. Canadian Government and Constitutional Law.
36. Government of the British Isles.
37. Government of Continental Europe.
38. Government of United States.
39. Modern Democracies.
40. Municipal Government.
41. National Problems.
42. Population Problems.

Commerce and Administration.

50. Industrial Management.
52. Principles of Marketing.
53. Marketing, Foreign.
54. Business Finance.
55. Investments.
57. Business Statistics.
59. Business Policy.
60. Commercial Law.
63. Elements of Accounting.
64. Intermediate Accounting.
65. Intermediate Accounting.
67. Auditing.
90. Contemporary Political Theory
91. Business Cycles.

ECONOMICS 1. INTRODUCTION TO ECONOMICS.

A general discussion of the principles governing the production, consumption, exchange and distribution of wealth, and the application of economic principles to such concrete problems as money, banking, taxation, trusts, the tariff, and the labor movement.

All students in this course who are not taking Economics 4 are required to read Gras, *Introduction to Economic History* (Harpers).

Garver and Hansen, *Principles of Economics* (Ginn).

Monday, Wednesday, and Friday at 8.

Professor Mackintosh and members of the Department.

ECONOMICS 2. INTRODUCTION TO POLITICS.

An approach to the study of the state, its nature, activities, and international relations, and a comparative study of governments, particularly those of Great Britain, the United States and the British Dominions.

Morris, *History of Political Ideas* (Christophers).
Laski, *Studies in the Problem of Sovereignty* (Yale).
Bagehot, *The English Constitution* (Kegan Paul).
Finer, *Foreign Governments at Work* (Oxford).
Read, *International Law and International Relations.*
Mill, *Representative Government* (Everyman).

Monday, Wednesday, and Friday at 10. Mr. Sutherland.

ECONOMICS 3. ECONOMICS FOR APPLIED SCIENCE STUDENTS.

Monday and Wednesday at 9. Professor Walker.

ECONOMICS 4. DESCRIPTIVE ECONOMICS.

A comprehensive study of the development of modern industry, its organization and resources.

Gras, *Introduction to Economic History* (Harpers).
Whitbeck and Finch, *Economic Geography* (McGraw-Hill).
Bartholomew, *School Economic Atlas* (Oxford).

Tuesday, Thursday, and Saturday at 9.
Professor Knox.

ECONOMICS 10. ECONOMIC THEORY.

An historical and critical study of economic theory. For Honour students only. To be taken in the fourth or fifth year.

Adam Smith, *Wealth of Nations* (Everyman edition).
Ricardo, *Principles of Political Economy* (Everyman edition).
Mill, *Principles of Political Economy* (Longmans).
Marshall, *Principles of Economics* (Macmillan).
Taussig, *Principles of Economics* (Macmillan).
Cassel, *Theory of Social Economy* (Harcourt Brace).

Tuesday, Thursday, and Saturday at 9. Mr. Aitkin.

ECONOMICS 11b. ECONOMIC PROBLEMS.

This course is designed for students in Commerce. A more detailed and fundamental consideration will be given to the problems taken up in Economics 1. The course should be taken in the fourth year.

Prerequisites: Economics 1 and 4.
Marshall, *Principles of Economics* (Macmillans).

Tuesday, Thursday, and Saturday at 8. Professor Knox.

ECONOMICS 12a. SOCIALISM.

A study of socialist analyses of our economic organization and of socialist progress.

Assigned Readings.

Given in 1931-32 but not in 1932-33.

Tuesday, Thursday, and Saturday at 8. Professor Knox.

ECONOMICS 16a. ECONOMIC HISTORY OF UNITED STATES AND CANADA.

A comparative study of the development of North American communities from colonial to metrpoolitan economy.
Falkner, *American Economic Development* (Harpers).

Assigned Readings.

(Offered in 1931-32 but not in 1932-33).

Tuesday, Thursday, and Saturday at 10. Professor Rogers.

ECONOMICS 19b. STATISTICAL THEORY AND METHOD.

A course in the collection, analysis, and charting of statistical data. Special attention will be given to graphic and diagrammatic presentation.

Mills, *Statistical Methods* (Holt).

Monday, Wednesday, and Friday at 10. Mr. Aitkin.

ECONOMICS 23b. INTERNATIONAL TRADE.

Prerequisite, Economics 25a.

Theory of international trade, foreign exchanges, international price changes, and tariff problems.

Taussig, *International Trade.*

(Offered in 1931-32 but not in 1932-33).

Tuesday, Thursday, and Saturday at 11. Professor Knox.

ECONOMICS 24b. PUBLIC FINANCE.

A general survey of the financial problems of government.
Lutz, *Public Finance* (Appletons).
Assigned Readings.

Monday, Wednesday, and Friday at 10. Mr. Aitkin.

ECONOMICS 25a. MONEY AND BANKING.

A general survey of the modern financial system. Money and credit, commercial banks, investment banks, trust companies, savings banks, loan and mortgage companies, co-operative credit institutions, stock exchanges and the other institutions which make up the present financial structure, will be studied with a view to ascertaining the functions which they perform, their relations to one another and to the economic system as a whole. A brief comparative study of the commercial banking systems of England, Scotland, France, Germany, United States, and Canada will also be made.

Dunbar, *The Theory and History of Banking* (G. P. Putnam's Sons, New York and London).
The Canadian Bank Act.
Burgess, *Federal Reserve Banks and the Money Market* (Harpers).
Readings in Money and Banking furnished through the Department.
Extra-mural students should also obtain
Moulton, *Financial Organization of Society* (The University of Chicago Press).
Lehfeldt, *Money* (Oxford Univ. Press).

Tuesday, Thursday, and Saturday at 11. Professor Knox.

ECONOMICS 32. INTERNATIONAL LAW AND ORGANIZATION.

A critical and historical study of international relations; a more detailed study of contemporary problems.
Woolf, *International Government* (Allen and Anwird).
Pollock, *The League of Nations* (Stevens and Sons).
Assigned Readings.

(Offered in 1931-32 but not in 1932-33).

Monday, Wednesday, and Friday at 9. Mr. Sutherland.

ECONOMICS 35b. CANADIAN GOVERNMENT AND CONSTITUTIONAL LAW.

A critical and historical study of the governmental institutions of Canada and of the British North America Act in particular. Students are advised to take History 40a as a preliminary to this course.

Assigned Readings.

Monday, Wednesday, and Friday at 8. Professor Rogers.

ECONOMICS 39. MODERN DEMOCRACIES.

A criticism of democratic institutions based upon a detailed examination of the theory and practice of modern democratic government.

This course may be taken as a half course of the first term or as a half course of the second term or as a full course.

Bryce, *Modern Democracies* (Macmillan).

Lowell, *Public Opinion and Popular Government* (Macmillan).

Lewis, Party Principles and Practical Politics (Prentice-Hall).

Assigned Readings.

(Offered in 1931-32 but not in 1932-33).

Tuesday, Thursday, and Saturday at 11. Mr. Sutherland.

*E*CONOMICS 90. CONTEMPORARY POLITICAL THEORY.

Students will read the works of Laski, Maciver, Wallas, Cole, and examine the viewpoint of Communism and Fascism. They will be expected to choose one topic out of the general subject, and prepare a lengthy essay on it.
Students who lack a knowledge of Philosophy are advised to read

Joad, *Introduction to Modern Philosophy.*

Mr. Sutherland.

ECONOMICS 91. BUSINESS CYCLES.

A seminar course dealing with the economic problems of a dynamic capitalistic society, as shown in the phenomena of business cycles.

Mitchell, *Business Cycles.*

Professors Mackintosh and Knox.

MENTAL AND MORAL PHILOSOPHY

PROFESSOR OF PHILOSOPHY—George Humphrey, M.A., Ph.D.

LECTURER—Gregory Vlastos, Ph.D.

TUTORS—to be appointed.

REGULATIONS

1. Every candidate for the Honour B.A. degree must take either Philosophy 1 or Philosophy 2. Enrolment in these courses will be approximately equalized, though individual preferences will be considered as far as possible.

2. Philosophy 1 and 2 are presupposed by the other courses.

3. Students taking Philosophy as one of their main subjects on a Pass Course will take Philosophy 1, 2 and one of 10, 25, or 48a and 49b.

4. Students taking an Honour Course in Philosophy will be permitted to take an advanced course with the second Pass class taken, if courses 1 and 2 are not taken in the same year. The Department should be consulted as to courses open.

5. Honour students must take courses 1, 2, and from three to five others. They must include 99 if their work is mainly done in this Department. The advanced work is offered in a cycle in successive years.

COURSES OF INSTRUCTION

PHILOSOPHY 1. INTRODUCTION TO THE PROBLEMS OF PHILOSOPHY.

The aim of this course is the recognition of some of the difficulties which confront the plain man when he attempts to formulate his beliefs about the physical world and about the mind. Certain attempted solutions of these difficulties will be examined, but advanced criticism will not be offered.

Russell, *The Problems of Philosophy* (Home University Library).

Berkeley, *The Principles of Human Knowledge* (Everyman).

Typed notes, covering the same field as the lectures, will be distributed.

Monday, Wednesday, and Friday at 9.

Dr. Vlastos.

PHILOSOPHY 2. PSYCHOLOGY.

An elementary survey of mental life.

Pillsbury, *Essentials of Psychology* (Macmillan).

Kimball Young, *Source Book for Social Psychology* (Knopf).

Allport, *Social Psychology* (Houghton Mifflin).

Extra-Mural students will buy also

Humphrey, *Story of Man's Mind* (Dodd Mead).

Tuesday, Thursday, and Saturday at 11.

Professor Humphrey.

PHILOSOPHY 10. INTRODUCTION TO METAPHYSICS.

The Province, the Method, and the Value of Metaphysics. Our knowledge of the physical and of the psychical world. Causality. The method of the mathematical and of the experimental sciences.

Broad, *The Mind and its Place in Nature* (Harcourt, Brace and Co.).

Descartes, *Meditations* (Everyman).

Spinoza, *Ethics I, II. De Intellectus Emendatione* (Everyman).

Locke, *Essay on the Human Understanding* (Ed. Pringle-Pattison, Clarendon Press).

Berkeley, *Principles of Human Knowledge* (Everyman).

Hume, *Treatise on Human Nature, Book I* (Everyman).

Monday, Wednesday, and Friday at 10.

Dr. Vlastos.

PHILOSOPHY 25. PSYCHOLOGY OF THE CHILD.

The aim of this course is to give a psychological insight into the problems of the development and education of the child and young person. The theory and application of mental testing are discussed, and arrangements will be made for practical work in testing.

Woodrow, *Brightness and Dullness in Children* (Lippincott).

Freeman, *Mental Tests* (Houghton, Mifflin).

Sandiford, *Educational Psychology* (Longmans).

Readings are also required in other texts.

Tuesday, Thursday, and Saturday at 9.

Professor Humphrey.

PHILOSOPHY 27. KANT.

General survey of the Philosophy of Kant with special study of the Critique of Pure Reason.

Kant, *Critique of Pure Reason,* Translations by Max Müller (Macmillan) and Meiklejohn (Bohn). Candidates who do not read German require Müller's translation.

Prolegomena to any Future Metaphysic, Translation by Mahaffy and Bernard (Macmillan).
Caird, *The Critical Philosophy of Kant* (Jackson, Wylie & Co.),
Kemp Smith, *Commentary to Kant's Critique of Pure Reason* (Macmillan).
Watson, *Kant Explained* (Maclehose).
Paulsen, *Kant* (Fromann's *Klassiker der Philosophie*).
Prichard, *Kant's Theory of Knowledge* (Clarendon Press).
Not offered in session 1931-32.

PHILOSOPHY 28. MORAL AND POLITICAL PHILOSOPHY.

Plato, *Apology, Euthyphro, Protagoras, Meno, Republic.*
Aristotle, *Nicomachean Ethics.*
Kant, *Fundamental Principles of the Metaphysic of Morals.* (Abbott's Translation).
Locke—*Treatises of Civil Government.*
Rousseau, *Social Contract.*
Mill, *Utilitarianism.*
Field, *Moral Theory.*
Moore, *Principia Ethica.*
Green, *Prolegomena to Ethics.*
Principles of Political Obligation.
Not offered in session 1931-32.

PHILOSOPHY 29. LOGIC.

Joseph, *Introduction to Logic* (Clarendon Press).
Cook Wilson, *Statement and Inference* (Clarendon Press).
Bradley, *Principles of Logic.*
Tuesday, Thursday, and Saturday at 10.
Dr. Vlastos.

PHILOSOPHY 44. THE PRINCIPLES OF PSYCHOLOGY.

A systematic presentation of present day psychological doctrine, which is discussed in the light of the experimental evidence. The course involves practical work, the hours of which will be arranged.
Ladd and Woodworth, *Physiological Psychology* (Scribner).
Keith Lucas, *The Conduction of the Nervous Impulse.* (Longmans).
Adrian, *The Basis of Sensation* (Christopher).
Reading is also required in the current literature.
Monday, Wednesday, and Friday at 11.
Professor Humphrey.

'PHILOSOPHY 45. PSYCHOLOGY OF THE INSTINCTS AND EMOTIONS.

This course is arranged for extra-mural students.

Professor Humphrey.

PHILOSOPHY 48a. ABNORMAL PSYCHOLOGY.

A study of the more modern theories of abnormal mental action, with their relation to normal psychology and everyday mental hygiene.

W. MacDougall, *Abnormal Psychology* (Scribners).

Readings are also required in other texts.

Not offered in session 1931-32.

Professor Humphrey.

PHILOSOPHY 49b. HISTORY OF PSYCHOLOGY.

Discusses the solutions that representative psychological thinkers from Greek times to the present day have given of certain persistent problems, such as the relation of the mind to the body and the unity of the mind.

Brett, *History of Psychology.*

Rand, *The Classical Psychologists* (Houghton Mifflin).

Not offered in session 1931-32.

Professor Humphrey.

PHILOSOPHY 98. PROBLEMS IN PSYCHOLOGY...

A specific problem of a minor character is taken up experimentally. A comprehensive report will be required, which will exhibit the results of the experimental work and give an account of the previous literature. This course is open for advanced students only, and by permission of the instructor.

Hours to be arranged.

Professor Humphrey.

PHILOSOPHY 99. READING AND SEMINAR COURSE.

The following subjects are suggested: The Theory of Mental Testing; Applied Psychology; Neo-Realism; The English Hegelians; Plato and Aristotle; The Philosophical Theory of the State. The Philosophy of Whitehead.

MATHEMATICS

Professor—J. Matheson, M.A.
Professor—C. F. Gummer, M.A., Ph.D.
Professor—N. Miller, M.A., Ph.D.
Assistant Professor—K. P. Johnston, B.A., B.Sc.
Lecturer—G. L. Edgett, M.A., Ph.D.
Lecturer—J. D. Stewart, M.A.
Lecturer—J. O. Watts, M.A.
Lecturer—R. W. Stevens, B.Sc.
Assistant—Mrs. E. Newlands, M.A.

Regulations

1. Mathematics 1, 2, 3a, and 7b, and Astronomy 1 are pass courses, and are open to all who have passed the prerequisites.

2. Students selecting Mathematics as one of their principal subjects for a Pass degree will take Mathematics 1, 2, 3a, and 7b; or Mathematics 1 and 2 and Astronomy 1.

3. Courses numbered 10 to 18 are Honour courses for undergraduates only. Courses 20-25 are advanced Honour courses, and may be counted towards either the B.A. or M.A. degree. Courses 30-34 are graduate courses, and are open only to students who have taken the equivalent of three full courses numbered 10 or higher.

4. Students are advised not to attempt a course in Honour Mathematics unless they have obtained high standing in the preceding pass course. Second division in such course is the minimum standing with which a student is allowed to proceed.

5. Students who have a standing of at least second division in Mathematics 1, or second class in the Mathematics of Honour Matriculation, and who intend to enter on the Honour Course in Mathematics, should take Course 2, 10a, and 11b in the same year.

6. Students who have taken Mathematics 10a and 11b must obtain through the Registrar permission to proceed with the Honour Course. Such permission should be obtained as soon as possible after the completion of these courses.

7. A candidate for an honour degree with his main work i. thematics will at the end of his course write a general examinatio. purpose of this examination is to test the student's grasp of the l.. id of undergraduate mathematics as a whole. He will be expected to show familiarity with the elementary parts of the subject and an accurate knowledge of the leading ideas of Algebra, Geometry and Calculus. A more detailed statement regarding the examination may be had on application to the department.

COURSES OF INSTRUCTION

MATHEMATICS 1. TRIGONOMETRY, ANALYTIC GEOMETRY, AND ALGEBRA.

DeLury, *Intermediate Algebra*, (Copp Clark).

Hall and Knight, *Elementary Trigonometry* (as revised 1928), (Macmillan).

Tanner and Allen, *Brief Course in Analytic Geometry* (American Book Co.).

Mathematical Tables from Handbook of Chemistry and Physics (Chemical Rubber Co.).

Monday, Wednesday, and Friday at 8.

Professors Matheson and Gummer, Dr. Edgett, and Messrs. Stewart and Watts.

MATHEMATICS 2. ELEMENTARY CALCULUS AND ANALYTIC GEOMETRY.

Granville, Smith and Longley, *Elements of the Differential and Integral Calculus* (Ginn).

Tanner and Allen, *Brief Course in Analytic Geometry* (American Book Co.).

Prerequisite, Mathematics 1.

Tuesday, Thursday, and Saturday, at 8.

Professor Gummer and Professor Miller.

MATHEMATICS 3a. MODERN SYNTHETIC GEOMETRY.

An elementary course. This half course with Mathematics 7b will count as a third course in Mathematics for a pass degree.

Durell, *Modern Geometry* (Macmillan).

Tuesday, Thursday, and Saturday at 11.

Professor Gummer.

MATHEMATICS 7b. MATHEMATICS OF INVESTMENT.

This class is intended primarily for students in Commerce, but is open to other students.

Hart, *Mathematics of Investment*, with tables (Heath).

Prerequisite, Mathematics 1.

Tuesday, Thursday, and Saturday at 11.

Dr. Edgett.

ASTRONOMY 1. A COURSE IN DESCRIPTIVE ASTRONOMY.

Baker, *Astronomy* (van Nostrand).

Kingston, *Star Guide.*

Mathematics not prerequisite.

Monday, Wednesday, and Friday at 9.

Professor Johnston.

MATHEMATICS 10a. ALGEBRA.

Prerequisite, Mathematics 1.
Hall and Knight, *Higher Algebra* (Macmillan).
Monday, Wednesday, and Friday at 11.
Professor Gummer.

MATHEMATICS 11b. CALCULUS.

Open to students who have taken the first half of Mathematics 2.
Granville, Smith and Longley, *Elements of the Differential and Integral Calculus* (Ginn).
Monday, Wednesday, and Friday at 11.
Professor Matheson.

MATHEMATICS 12a. DETERMINANTS AND THEORY OF EQUATIONS.

Prerequisites, Mathematics 2, 10a.
Dickson, *First Course in the Theory of Equations* (Wiley).
Monday, Wednesday, and Friday at 8.
Professor Johnston.

MATHEMATICS 13a. SYNTHETIC GEOMETRY.

A course in Modern Synthetic Geometry.
Prerequisite, Mathematics 2.
Tuesday, Thursday, and Saturday at 9.
Professor Matheson.

MATHEMATICS 14b. SPHERICAL TRIGONOMETRY AND ASTRONOMY.

In connection with this course some work will be done in the observatory.
Prerequisite, Mathematics 2.
Baker, *Astronomy* (van Nostrand).
Kingston, *Star Guide.*
Monday, Wednesday, and Friday at 8.
Professor Johnston.

MATHEMATICS 15a. ANALYTIC SOLID GEOMETRY.

Open to students who have taken, or are taking, 12a
Snyder and Sisam, *Analytic Geometry of Space* (Holt).
Tuesday, Thursday, and Saturday at 8.
Professor Gummer.

MATHEMATICS 16b. DIFFERENTIAL EQUATIONS.

Prerequisites, Mathematics 2, 10a, and 11b.
Tuesday, Thursday, and Saturday at 8.
Professor Miller.

MATHEMATICS 17b. ADVANCED ANALYTIC GEOMETRY.

Prerequisite, Mathematics 12a.

Monday, Wednesday, and Friday at 9.

Professor Gummer.

MATHEMATICS 18a. ADVANCED CALCULUS.

Prerequisites, Mathematics 11b, 12a, and three of 13b, 14b, 15a, 16b, and 17b.

Woods, *Advanced Calculus* (Ginn).

Monday, Wednesday, and Friday at 9.

Professor Miller.

MATHEMATICS 20b. FINITE DIFFERENCES AND PROBABILITY.

Prerequisites, Mathematics 12a and three of 13a, 14b, 15a, 16b, and 17b.

Reference:

Whittaker and Robinson, *Calculus of Observations* (Blackie).

Coolidge, *Introduction to Mathematical Probability* (Oxford University Press).

Monday, Wednesday, and Friday at 8.

Professor Gummer.

MATHEMATICS 21 a or b. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE.

Prerequisite, Mathematics 18a.

Townsend, *Functions of a Complex Variable* (Holt).

Professor Miller.

MATHEMATICS 22 a or b. THEORY OF NUMBERS.

Prerequisites, Mathematics 12a and three of 13a, 14b, 15a, 16b, and 17b.

Professor Johnston.

MATHEMATICS 23 a or b. MULTIPLE ALGEBRA AND QUATERNIONS.

Prerequisites, Mathematics 12a and three of 13a, 14b, 15a, 16b, and 17b.

Professor Matheson.

MATHEMATICS 24 a or b. FOURIER SERIES AND SPHERICAL HARMONICS.

Prerequisites, Mathematics 15a, 16b, 18a.

Professor Gummer.

MATHEMATICS 25 a or b. MATHEMATICAL THEORY OF STATISTICS.

Prerequisite, Mathematics 18a.

Dr. Edgett.

MATHEMATICS 30 a or b. THEORY OF INFINITE SERIES.

Prerequisite, Mathematics 18a.
Knopp, *Theory and Application of Infinite Series.*
Professor Miller.

MATHEMATICS 31 a or b. THEORY OF FUNCTIONS OF A REAL VARIABLE.

Prerequisite, Mathematics 18a.

Reference:

Goursat-Hedrick, *Mathematical Analysis,* Vol. 1 (Ginn).
Townsend, *Theory of Functions of Real Variables* (Holt).
Professor Miller.

MATHEMATICS 32 a or b. MODERN HIGHER ALGEBRA.

Bôcher, *Introduction to Higher Algebra* (Macmillan).
Professor Gummer.

MATHEMATICS 33 a or b. DIFFERENTIAL GEOMETRY.

Prerequisite, Mathematics 18a.
Eisenhart, *Differential Geometry* (Ginn).
Professor Gummer.

MATHEMATICS 34 a or b. PROJECTIVE GEOMETRY.

Veblen and Young, *Projective Geometry,* Vol. I.

PHYSICS

PROFESSOR—A. L. Clark, B.Sc., Ph.D., F.R.S.C.
RESEARCH PROFESSOR—J. A. Gray, B.Sc., D.Sc., O.B.E., F.R.S.C.
PROFESSOR—W. C. Baker, M.A.
PROFESSOR—J. K. Robertson, M.A., F.R.S.C.
PROFESSOR—E. Flammer, B.Sc., Ph.D.
LECTURERS—H. M. Cave, M.A., Ph.D.
B. W. Sargent, M.A.
E. E. Watson, M.Sc., Ph.D.
DEMONSTRATOR—V. C. Miller, B.A.
ASSISTANT—H. P. Dickey, B.Sc.

REGULATIONS

1. Students offering Physics as one of their chief subjects on a Pass Course under new regulations will take Physics 1, 2 and 11.

2. Students making Physics one of their two Honour subjects take in addition to Physics 1 and 2, from three to five courses, or the equivalent in half-courses. They may take Physics 2 and 11 in the same session if they have 62% on the University examination in Physics 1.

3. The additional courses are chosen after consultation with the Head of the Physics Department. Usually these will be 11, 12a, 14a, 10b and 13b, when three only are necessary. When five are required, two whole courses chosen from 16a, 17b, 20b, 21a, 99 are offered.

4. When Chemistry is the subject chiefly emphasized Mathematics 12a or 11b may be substituted for one of the half-courses in Physics.

5. Students taking the special course in Science for Teachers will choose advanced courses from 10b, 11, 12a, 13b, and 14a, the courses chosen to be decided after consultation with the Head of the Department. As a rule, course 11 is recommended.

6. The principal Physical Journals and books relating to the lectures and the laboratory work are kept in the Library of the Physics Department and in the University Library, where they may be freely consulted by the students. Certain of these may be borrowed for limited periods by making application to the librarians in charge.

COURSES OF INSTRUCTION

PHYSICS 1. MECHANICS, PROPERTIES OF MATTER, HEAT, WAVE-MOTION, SOUND, LIGHT, ELECTRICITY, AND MAGNETISM.

The work of this course is elementary, forming an introduction to the subject. Its purpose is to lay a thorough foundation for

subsequent work in theoretical, experimental, and technical Physics, as well as to give a fairly complete elementary knowledge of the subject to those who do not intend to pursue it further. Only an elementary knowledge of Mathematics is required. This class is usually divided into two sections (*a*) those going on to further work in Physics, and (*b*) all others.

Kimball, *College Physics* (1926-27) (Henry Holt).

Lectures: *Three hours, Tuesday, Thursday, and Saturday at* 11.

Laboratory: *Two hours, Tuesday* 1-3 *or Tuesday* 3-5 *or Wednesday* 3-5. Dr. Cave and Mr. Sargent.

PHYSICS 2. LIGHT AND ELECTRICITY AND MAGNETISM.

Students who enter this class with Honour Matriculation standing, and who have not taken Physics 1 may be required to do the laboratory work and to pass the examination of Physics 1. (See section 8 under ADMISSION).

LIGHT. The work in this section consists of a detailed discussion of vibratory and wave motion; a treatment of Reflection and Refraction from the standpoint of wave theory; and a study of Dispersion, Interference, Diffraction, Spectroscopy, Polarization, and Double Refraction.

ELECTRICITY AND MAGNETISM. A quantitative treatment of phenomena preliminary to the Mathematical Theory of these subjects.

Prerequisite: Physics 1 or Honour Matriculation.

Texts:

Robertson, *Introduction to Physical Optics* (Van Nostrand).

Reynolds, *Electricity and Magnetism* (Bell and Sons).

Lectures: *Three hours—Tuesday, Thursday and Saturday at* 9.

Laboratory: *Two hours—Wednesday* 3-5, *or Thursday* 3-5.

Professor Robertson, Dr. Cave and Dr. Watson.

PHYSICS 11. MECHANICS.

Honour students with second division standing in Physics 1 (or its equivalent as determined by the Department of Physics) may take this class at the same time as Physics 2.

The work of the class is the consideration of the fundamental principles of Mechanics, developing those dealt with in Physics 1 and proceeding to the Mechanics of Impact, Rotation, Simple Harmonic Motion, etc. A large part of the work will be the solution of problems in which the elementary calculus will be freely used.

Prerequisites: Physics 1 and Mathematics 2. For Pass students Physics 2 is also prerequisite.

Lectures: *Monday and Friday at* 2.

Laboratory: *Wednesday* 1-3.

Professor W. C. Baker.

PHYSICS 10b. MECHANICS.

A series of lectures in which the elements of statics and dynamics of a particle are discussed.

Prerequisite: Physics 2 (62%) and Physics 11 (55%).

Lectures: *Two hours—Tuesday and Thursday at* 10.

Laboratory: *Two hours—Thursday*, 3-5.

Professors W. C. Baker and Flammer.

PHYSICS 12a. INTRODUCTION TO THE MATHEMATICAL THEORY OF ELECTRICITY AND MAGNETISM.

Prerequisite: Physics 2 (62%) and Physics 11 (55%).

Lectures: *Two hours—Wednesday and Friday at* 10.

Laboratory: *Two hours—Tuesday*, 3-5.

Professor W. C. Baker.

PHYSICS 13b. ELECTRICITY AND MAGNETISM.

In this course an attempt is made to acquaint the student with some of the modern developments in Physics. Lectures are given on such topics as, The Structure of the Atom, Conduction of Electricity through Gases, Radioactivity and X-rays.

Prerequisite: Physics 2 (62%) and Mathematics 2.

Text-book:

J. A. Crowther, *Ions, Electrons and Ionizing Radiations.*

Lectures: *Two hours—Wednesday and Friday at* 10.

Laboratory: *Two hours—Tuesday*, 3-5.

Professor Clark and Dr. Cave.

PHYSICS 14a. HEAT.

A course on the fundamental laws of Thermodynamics and their application to the Thermodynamical Scale of Temperature, to the treatment of Saturated Vapours and to Reversible Processes in general.

Prerequisite: Mathematics 2 and Physics 2 (62%).

Lectures: *Two hours—Tuesday and Thursday at* 10.

Laboratory: *Two hours—Thursday*, 3-5.

Professor Clark and Dr. Cave.

PHYSICS 16a. DYNAMICS OF RIGID AND ELASTIC BODIES.

A discussion of Motions of a Rigid Body, Ellipsoids of Inertia, Motion with Fixed Axis and Fixed Point, Euler's Equations, and applications to Motion of the Symmetrical Top. Stress and Strain Relations in Elastic Bodies, Elastic Constants.

Prerequisite: Physics 10b (55%).

Lectures: Three hours—Monday, Wednesday, and Friday at 11.

Professor Flammer.

PHYSICS 17b. PHYSICAL OPTICS.

A course of lectures on the theory and phenomena of Physical Optics, including a discussion of Wave Motion, Diffraction, Interference Spectroscopes, Spectroscopy, Polarization and Double Refraction.

Prerequisite: 55% on each of Physics 10b, 12a, and 13b.

Lectures: Two hours—Tuesday and Thursday at 11.

Laboratory: Two hours—Tuesday 2-4, *or Wednesday* 2-4.

Professor Robertson.

PHYSICS 20b. ELECTRICITY AND MAGNETISM.

Electrodynamics, Conduction through Gases.

Prerequisite: 55% on each of Physics 10b, 12a, and 13b.

Lectures: Three hours—Monday, Wednesday, and Friday at 11.

Professor Flammer.

PHYSICS 21a. KINETIC THEORY OF GASES.

Prerequisite: 55% on each of Physics 10b, 12a, 13b, and 14a.

Text-book:

Bloch, *Kinetic Theory of Gases.*

Lectures: Three hours—Tuesday, Thursday, and Saturday at 11.

Professor Gray.

PHYSICS 22 a or b. LABORATORY. *Six hours.*

PHYSICS 27 a or b. MECHANICS.

The development and application of such important principles as the Principle of Virtual Work, Principle of d'Alembert, Hamilton's Principle of the Least Action, Lagrange's Equations, and a brief treatment of Non-Newtonian Mechanics. *Three hours.*

Professor Flammer.

PHYSICS 28 a or b. THERMODYNAMICS. ADVANCED COURSE.

PHYSICS 29 a or b. OPTICS.

PHYSICS 30 a or b. ELECTRICITY AND MAGNETISM.

PHYSICS 31 a or b. RADIATION AND QUANTUM HYPOTHESIS.

PHYSICS 32 a or b. PARTIAL DIFFERENTIAL EQUATIONS OF PHYSICS.

PHYSICS 33 a or b. ELECTRICAL OSCILLATIONS.

PHYSICS 34 a or b. HYDRODYNAMICS AND AERODYNAMICS.

PHYSICS 35. LABORATORY.

Usually a small piece of directed research under the immediate supervision of a member of the staff. The aim is to familiarize the student with the conditions, methods, and spirit of physical research. If the student proves himself capable, he may be given a problem for independent investigation.

PHYSICS 36b. QUANTUM MECHANICS.

Lectures—Three hours.

Professor Flammer.

PHYSICS 99. HONOUR SEMINAR AND READING COURSE.

Each student will be assigned work after consultation with the Head of the Physics Department.

The work in connection with this course will consist not only of independent reading but also of experimental work relating to the special field in which the student is reading.

CHEMISTRY

PROFESSOR OF CHEMISTRY—Arthur C. Neish, B.A., A.M., Ph.D., F.C.I.C.
PROFESSOR—L. F. Goodwin, A.C.G.I.. Ph.D., F.I.C.
PROFESSOR—J. A. McRae, M.A., Ph.D., F.I.C.
ASSOCIATE PROFESSOR—J. F. Logan, B.A., A.M., Ph.D.
ASSISTANT PROFESSOR—Grenville B. Frost, B.A., Ph.D.
ASSISTANT PROFESSOR—L. A. Munro, M.A., Ph.D., F.C.I.C.
ASSISTANT PROFESSOR—Roy L. Dorrance, M.A.
INSTRUCTOR—M. C. McNab, M.A.
MILTON HERSEY FELLOW—F. M. Alderson, B.A.
DEMONSTRATORS—Grant Hern, B.A.
A. O. Rogers, B.A.

REGULATIONS

Sequence: Chemistry 1 and 2 are prerequisite to all other courses in Chemistry.

Students offering Chemistry as one of the main subjects for a Pass degree under the new regulations will take Chemistry 1, 2 and 3. For entrance to all other Chemistry courses a second division in Chemistry 2 is necessary.

Honours, Five courses: Chemistry 1, 2, 21, 35, 41.

Honours, Six courses: Chemistry 1, 2, 21, 35, 41, 61 or 71.

Honours, Seven courses, with Physics Minor: Chemistry 1, 2, 21, 35, 41, and two other full courses from Chemistry 61, 71, 101b, 106b, 121, 145, 141, 171a.

Honours, Seven courses, with Biology Minor: Chemistry 1, 2, 21, 35, 41, and two other full courses from Chemistry 61, 71, 101b, 106b, 121, 145, 141, 171a.

Honours, Seven courses, with Minor consisting of Geology 1 (62%), Mineralogy 1 (62%), Geology 10, and any other two courses numbered 10 or over in Geology or Mineralogy; Chemistry 1, 2, 21, 35, 41, and two other full courses from Chemistry 61, 71, 101b, 106b, 121, 145, 141, 171a.

NOTE.—In the above Honours, Seven Courses, either 61 or 71 but not both may be counted towards Honours. Students taking Honours in Chemistry must consult the Head of the Department after they have passed Chemistry 2. All students taking Honours in Chemistry must take Physics 1 if this course has not been granted on certificates.

Candidates for the degree of M.A. who include Chemistry as one of their two special subjects must have their choice of courses approved by the Department.

	First Courses	Second and Advanced Courses	Research Training Courses
General and Inorganic Chemistry	1	101b, 106b	201
Qualitative Analysis	2		
Organic Chemistry	21	121	221
Quantitative Analysis	3,35		231
Physical Chemistry	41	145, 141	241
Physiological Chemistry	61		261
Industrial Chemistry	71	171a	271

COURSES OF INSTRUCTION

General and Inorganic Chemistry

CHEMISTRY 1. GENERAL CHEMISTRY.

This course besides dealing with the history, methods of preparation, properties and industrial application of the most important non-metals and metals and their compounds, emphasizes the fundamental theories, laws and principles of Chemistry. Elementary analytical chemistry is introduced and a few simple unknowns are given. This course is open to beginners in Chemistry.

Texts—Kendall, *Smith's College Chemistry* (Century Co.)

Belcher and Colbert, *Properties and Numerical Relationships of the Common Elements and Compounds* (Century Company).

Lectures—Monday, Wednesday, and Friday at 9 *in room* 310.
Laboratory—Thursday, 1-3, *in rooms* 305-308.

Professor Neish and Assistants.

CHEMISTRY 101b. ADVANCED GENERAL CHEMISTRY.

The work of this course is devoted to the study of the phase rule and its application.

Prerequisite—Chemistry 1, 2, 21, 35, 41.

Lectures—Monday and Friday at 11 in room 105.
Laboratory—Wednesday, 1-4, room 209.

Professor Frost.

CHEMISTRY 106b. COLLOID CHEMISTRY.

An introductory course of three hours per week for the second term. The lectures will deal with the general properties of colloids, surface phenomena, adsorption, special stress being laid upon the practical applications of Colloid Chemistry. The

laboratory work is illustrative of the topics dealt with in lectures and includes the preparation of colloids by different methods and a study of their electrical properties, coagulation, surface tension, viscosity, adsorption, gels, etc.

Prerequisite—Physics 1 and Chemistry 1, 2, 21, 3 or 35 and 41; or Chemistry 106b and 21, 3 or 35, and 41 may be taken in the same year.

Texts—Holmes Lab. Manual of Colloid Chemistry (Wiley and Sons).
Hatschek, *Introduction to Physics and Chemistry of Colloids.* 5th edition (Blakistons Sons and Co.).

Reference Texts—Alexander, *Colloid Chemistry*, Vol. I (Chem. Catalogue Co.).
Svedberg, *Colloid Chemistry* (Chem. CatalogueCo.).
Bancroft, *Applied Colloid Chemistry* (McGraw-Hill Co.).
Weiser, *Hydrous Oxides* (McGraw-Hill Co.).

Lectures and Laboratory Mon. 1-4.

Professor Munro.

CHEMISTRY 201. GENERAL AND INORGANIC CHEMISTRY—Research Training.

For graduate students electing thesis work in Inorganic Chemistry.

Professors Neish, Frost, and Munro.

Qualitative Analysis

CHEMISTRY 2. QUALITATIVE ANALYSIS.

The lectures deal with the theory of analytical chemistry. The modern concept of the structure of matter is related to analytical behaviour. The development and application of the laws of equilibrium and solutions are emphasized.

The laboratory work consists of the systematic analysis of basic and acid ions leading to the analysis of alloys, salt mixtures, minerals and various commercial products.

Prerequisite—Chemistry 1.

Texts—Miller, *Theory of Qualitative Analysis* (Century Co.).
A. A. Noyes, *Qualitative Chemical Analysis*, 1922 edition, (Macmillan Co.).

Reference Texts—Ware, *Essentials of Qualitative Analysis* (Wiley).
Steiglitz, *Qualitative Chemical Analysis*, Vol. 1, (Century Co.).
Treadwell and Hall, Vol. I (Wiley).

Lectures—Tuesday and Thursday at 11 in room 310,
Laboratory—Wednesday, 1-4, in rooms 107, 109.

Professor Munro.

Organic Chemistry

CHEMISTRY 21. ORGANIC CHEMISTRY.

An elementary course in general organic chemistry. The properties of some of the more important compounds are studied in the laboratory and a number of them prepared.

Prerequisite—Chemistry 1, 2.

Texts—

Perkin and Kipping, *Organic Chemistry* (W. R. Chambers).

Adams and Johnson, *Laboratory Experiments in Organic Chemistry* (Macmillan Company).

Lectures—Wednesday and Friday at 11 in room 105.

Laboratory—Wednesday, 1-4, in room 213.

Professor McRae.

(The laboratory work may also be done on *Tuesday* 1-4, or *Saturday* 9-12).

CHEMISTRY 121. ADVANCED ORGANIC CHEMISTRY.

Advanced systematic organic chemistry, including lectures on special topics such as terpenes, alkaloids, stereoisomerism and carbohydrates. The laboratory work includes both practice in organic qualitative and quantitative analysis, and practice in the preparation of a considerable number of substances illustrating the general methods and reactions of Organic Chemistry.

Prerequisite—Chemistry 1, 2, 21, 35, 41; or Chemistry 121 and 41 may be taken in the same year.

Texts—Bernthsen-Sudborough, *Organic Chemistry* (Blackie & Sons).

Cohen, *Practical Organic Chemistry* (Macmillan Co.).

Books of Reference—

Cohen, *Advanced Organic Chemistry* (Arnold).

Henrich-Johnson, *Theories of Organic Chemistry* (Wiley & Sons)

Lectures—Tuesday and Thursday at 11, in room 105.

Laboratory—Wednesday 1-4, *or Saturday* 9-12, *in room* 213.

Professor McRae.

CHEMISTRY 221. ORGANIC CHEMISTRY—Research Training.

For graduate students electing thesis work in Organic Chemistry.

Professor McRae.

Quantitative Analysis

CHEMISTRY 3. QUANTITATIVE ANALYSIS.—Pass Course.

This is an elementary course designed to illustrate the fundamental procedures of Quantitative Analysis. Gravimetric determinations are made of sulphur, chlorine, iron and phosphorous.

A full treatment of volumetric analysis is given, including acidimetry and oxidation-reduction methods. The determinations include iron, chromium and manganese in simple ores, iodimetric copper, the analysis of brass, and other similar determinations.

Text—Hall, *Textbook of Quantitative Analysis* (Wiley).
Lectures—Thursday at 1 in room 310.
Laboratory—Wednesday or Thursday 1-5 in room 207.
Professor Frost.

CHEMISTRY 35. QUANTITATIVE ANALYSIS—Honour Course.

The class-room work is of a more advanced nature than that of Pass course 3, and the laboratory determinations cover a wider range of practice and technique.

Text-book: Hall, *Textbook of Quantitative Analysis* (Wiley) .

Note.—For intra-mural honour students this is a whole course. For extra-mural students at Summer School it is divided into half courses, offered in successive years, and may be taken by either pass or honour students.

Lectures—Monday, and Wednesday at 9, room 105. *Laboratory—Wednesday, or Thursday,* 1-4.
Professor Frost.

CHEMISTRY 231. QUANTITATIVE ANALYSIS—Research Training.

For graduate students electing thesis work in Quantitative Analysis.
Professor Frost.

Physical Chemistry

CHEMISTRY 41. PHYSICAL CHEMISTRY.

The principles of Physical Chemistry, and their application to the study of chemical reactions and equilibria. Special attention is given to problems of industrial importance. The laboratory work is designed to acquaint the student with the most important physical chemical measurements and to train him in habits of accuracy, and in the planning of methods for research.

Prerequisite—Chemistry 1, 2, 21, 3 or 35, or 3 or 35 and 41 in the same year.

Texts—Walker, *Elements of Physical Chemistry* (Macmillan).
Findlay, *Practical Physical Chemistry* (Longmans, Green & Co.)
Lectures—Tuesday and Thursday at 9, in room 201.
Laboratory—Wednesday, 1-4, or *Tuesday,* 1-4, in rooms 115, 116
Professor Goodwin.

CHEMISTRY 141. ADVANCED PHYSICAL CHEMISTRY.

This course is designed to give the student an intimate working knowledge of the fundamental principles of Physical Chemistry, and a measure of command in the use of these principles in the solution of chemical problems. A full discussion of thermodynamics is given, including the numerical calculation of free energy and entropy, and a brief treatment of the Nernst Heat Theorem.

Prerequisite—Chemistry 1, 2, 21, 35, 41, and a knowledge of elementary calculus.

Reference:

Sherrill, *Laboratory Experiments on Physico-Chemical Principles* (Macmillan).

Taylor, *Elementary Physical Chemistry* (Van Nostrand).

Lectures—Tuesday and Thursday at 10 in room 105.

Laboratory—Friday 1-4, in room 209.

Professor Frost.

CHEMSTRY 145. PHYSICAL CHEMISTRY, ELECTRO-CHEMISTRY.

This course is designed to acquaint the student with the application of electricity to aqueous solutions considering such quantities as the mechanism of electrolysis, transport numbers and ionic migration, solvation of ions, conductance of solutions, modern dissociation theory, reversible cells with and without diffusion, hydrogen electrode, polarization, overvoltage, anodic and cathodic reactions. Some industrial applications such as storage batteries, electrolysis of fused salts, electroplating are discussed. The laboratory work consists in the determination of the quantities discussed in the lectures, electrometric titrations, and the production, electrolytically, of such compounds as ammonium persulphate and white lead.

Prerequisite—Chemistry 1, 2, 21, 35, 41.

Texts:

Glasstone, S., *The Electrochemistry of Solutions* (Methuen and Co., Limited).

Findlay, *Practical Physical Chemistry* (Longmans, Green and Company).

Reference:

Thomson, *Theoretical and Applied Electrochemistry* (Macmillan Company).

Blum and Hogaboom, *Principles of Electroplating and Electroforming* (McGraw-Hill).

Kolthoff and Furman, *Potentiometric Titrations* (John Wiley).

Allmand—*Applied Electrochemistry* (Arnold).

Lectures—Monday at 10 *and Tuesday at* 8.
Laboratory—Thursday 1-4, *or Wednesday* 1-4.

Professor Dorrance.

CHEMISTRY 241. PHYSICAL CHEMISTRY—Research Training.

For graduate students electing thesis work in Physical Chemistry.

Professors Goodwin, Frost and Dorrance.

Physiological Chemistry

CHEMISTRY 61. PHYSIOLOGICAL CHEMISTRY.

The course includes a detailed study of the properties of the carbohydrates, lipoids and proteins and of the chemical processes involved in respiration, secretion, digestion, absorption, metabolism and excretion and the chemistry of the tissues. The composition of foods and the elements of the science of nutrition are also discussed.

Prerequisite—Chemistry 1, 2, 21 and 3 or 35 or their equivalent.

Texts—Bodansky, *Introduction to Physiological Chemistry* (John Wiley and Sons).

Hawk and Bergeim, *Practical Physiological Chemistry* (Blakiston).

Lectures—Monday and Friday at 11.
Laboratory—Section A, Monday 1-4, *and Tuesday,* 1-3.
Section B, Thursday 1-4, *and Friday* 1-3.

Professor Logan.

CHEMISTRY 261 PHYSIOLOGICAL CHEMISTRY—Research Training.

For graduate students electing thesis work in Physiological Chemistry.

Professor Logan.

Industrial Chemistry

CHEMISTRY 71. INDUSTRIAL CHEMISTRY—Lectures and Laboratory.

In the lectures the following topics, illustrated by specimens, lantern slides, motion pictures, and visits to plants will be discussed: Industrial applications of air and water, natural gases, petroleum products, producer gas, water gas, coal gas, by-product coke, sulphur, sulphuric acid, sulphite, pulp and paper, hydrochloric acid, nitric acid and ammonia, nitrates natural and synthetic, soda, fertilizers, mortars and cements.

In the laboratory typical industrial processes such as crystallization, precipitation, filtration, distillation and rectification,

incomplete reactions, gas analysis and industrial flow sheets will be carried out and interpreted.

Prerequisite—Chemistry 1, 2, 21, 3, or 35 and Physics 1.

Texts—Rogers, *Manual of Industrial Chemistry* (Van Nostrand).
Atack, *Chemist's Year Book* (Westman Press), or Olsen, *Van Nostrand's Annual* (Van Nostrand).

Lectures—Tuesday and Thursday at 10, in room 310.
Laboratory—Monday 1-4, in room 210.

Professor Neish.

CHEMISTRY 171a. ADVANCED INDUSTRIAL CHEMISTRY.

This course deals with the following subjects: Distillation and dephlegmation, wood distillation, alcohol, acetic acid, acetone. Dissolution, decantation, filtration, centrifugals. Manufacture of organic nitro compounds and explosives, cyanamide, ammonia. Equilibrium and optional conditions for contact sulphuric acid and synthetic ammonia processes, absorption of gases by liquids and solids, absorption and reaction towers, electric furnace products and synthetic acetone, potash, manufacture and recovery, recovery of waste acids, ceramics, firms; sulphite, sulphate and mechanical wood pulp, paper.

Prerequisite—Chemistry 1, 2, 21, 3 or 35, 41, 71.

Texts—Partington, *The Alkali Industry* (Balliere, Tindall & Co.).

References to books in Library.

Lectures—Monday and Friday at 11, in room 105,
Laboratory—Monday 1-4, in room 112.

Professor Goodwin

CHEMISTRY 271. INDUSTRIAL CHEMISTRY RESEARCH.

For graduate students electing thesis work in Industrial Chemistry.

Professors Neish and Goodwin.

BIOLOGY

PROFESSOR—W. T. MacClement, M.A., D.Sc.
PROFESSOR—R. O. Earl, B.A, S.M., Ph.D.
ASSOCIATE PROFESSOR—A. B. Klugh, M.A., Ph.D.
LECTURER—R. A. Ingalls, M.A., Ph.D.

REGULATIONS

1. Students taking only one course in this department must choose either Biology 1 or Biology 2; it is not necessary to take Biology 1 before Biology 2. Such students must attend laboratory, Section A. Section B is for students taking more than one course in Biology.

2. A student selecting Biology as one of the chief subjects on a Pass Course under the new regulations will take Biology 1, 2 and either 11 or 16.

3. Honour students must consult the department about the courses to be taken. They must take courses 1 and 2, and from three to five others, among which may be selected courses in Bacteriology. They may take Biology 2 and 11 in the same session.

COURSES OF INSTRUCTION

BIOLOGY 1. GENERAL BOTANY.

The fundamental facts and principles of plant life. A careful study of form, structure and reproduction of representatives of the principal groups. Attention is given to life processes, particularly in the higher plants.

Textbook: Holman and Robbins, *Textbook of General Botany* (John Wiley and Sons). Laboratory Manual.

Lectures, Tuesday and Thursday at 9.

Professor Earl.

Laboratory, Section A, for students taking not more than one course in Biology, *Monday*, 2-4.

Laboratory, Section B, for all students taking more than one course in Biology, *Wednesday* 1-4.

BIOLOGY 2. GENERAL ZOOLOGY.

Lectures on the classification, morphology, physiology, development, evolution, distribution, and economic importance of animals.

Microscopic study of the protozoa and hydra, and dissection of the clam, earthworm, locust, crayfish, fish, frog, bird and mammal.

Textbooks:

Dakin, *Elements of General Zoology* (Oxford Press).

Colton, *Practical Zoology* (D. C. Heath).

Lectures, Tuesday and Thursday at 10.

Laboratory, Section A, Thursday, 2-4—for students taking only one course in this department.

Laboratory, Section B, Monday, 1-4—for students taking more than one course in this department.

Professor Klugh.

COURSES MAINLY MORPHOLOGICAL

BIOLOGY 11. PLANT ANATOMY.

The study of the anatomical structure of plants. The preparation of permanent microscopic mounts.

Prerequisite—Biology 1.

Textbook: Eames and McDaniels, *Plant Anatomy* (McGraw-Hill).

Lectures, Monday and Wednesday at 9.

Laboratory, Wednesday, 1-4.

Professor MacClement.

BIOLOGY 12. TAXONOMY OF PLANTS.

The principles of classification applied to Algae, Fungi, Mosses, Ferns, Fern Allies, and Flowering Plants.

Prerequisites—Biology 1 and a collection of at least 100 plants preserved by the student.

Textbooks:

Swingle, *Systematic Botany* (McGraw-Hill).

Gray, *New Manual of Botany* (American Book Co.).

Lectures, Monday and Wednesday at 8.

Laboratory, Monday, 1-4.

Professor MacClement.

BIOLOGY 13. ECONOMIC FUNGI.

Class and laboratory studies of the fungi producing the more important plant diseases.

Prerequisites—Biology 1, 11.

Textbooks:

Owens, *Plant Pathology.*

Whetzel, *Laboratory Outlines of Plant Pathology.*

Lectures, Tuesday and Thursday at 8.

Laboratory, Tuesday 1-4.

Professor MacClement.

BIOLOGY 14b. AUTOPHYTIC CRYPTOGAMS.

The morphology of the Algae, Bryophytes, Pteridophytes and Gymnosperms.

Lectures, Monday and Friday at 10.

Laboratory, Friday 1-4.

Professor Earl.

BIOLOGY 16. ANIMAL ANATOMY AND PHYSIOLOGY.

The microscopical study of animal tissues.

Study of slides of typical invertebrates.

Dissection of the frog. Lectures and practical work in animal physiology.

Prerequisite—Biology 2.

Textbooks:

Hegner, *College Zoology* (Macmillan).

Marshall, *The Frog.*

Mitchell, *General Physiology* (McGraw-Hill).

Lecture, Thursday at 9.
Laboratory, Wednesday and Friday, 2-4.

Dr. Ingalls.

BIOLOGY 17. CANADIAN ZOOLOGY.

The classification, distribution, life histories, habits and economic importance of the commoner and more important Canadian ani-

mals. Field study of animals and their environment and the study of museum specimens representative of each group.

Prerequisite—Biology 2.

Lectures, Tuesday and Thursday at 11.

Laboratory, Friday 2-4.

Professor Klugh.

BIOLOGY 18. EMBRYOLOGY.

The Embryology of the pig and chick.

Prerequisites—Biology 2, 16, 26.

Hours to be arranged. Dr. H. G. Ettinger.

COURSES IN PHYSIOLOGY

BIOLOGY 21. PLANT PHYSIOLOGY.

A series of experimental studies of the chemical and physical activities of plants, with class discussions.

Prerequisites—Biology 1, Chemistry 1.

Textbook: Raber, *Principles of Plant Physiology* (Macmillan).

Lectures, Tuesday and Thursday at 10.

Laboratory, Monday, 1-4.

Dr. Ingalls.

BIOLOGY 26. ANIMAL PHYSIOLOGY.

Study of the general principles of Physiology, and the physiological investigation of blood, circulation, respiration, muscle, and nervous system. The physiology of digestion, metabolism, excretions, and internal secretions.

Prerequisites—Biology 2 (or 3) and 16.

Hours to be arranged.

Dr. G. S. Melvin.

COURSES IN ECOLOGY.

BIOLOGY 31a. PHYSIOGRAPHIC AND GEOGRAPHIC PLANT ECOLOGY.

A study of the origin and development of plant associations in relation to environment. The relations of plants to latitude, altitude, climate, and other distributive factors. Lectures and field work, the latter especially at week-ends.

Textbook: Weaver and Clements, *Plant Ecology* (McGraw-Hill).

Prerequisites—Biology 1, 11.

Lectures, Monday, Wednesday, and Friday at 10.

Professor Earl.

BIOLOGY 32b. ANATOMICAL PLANT ECOLOGY.

A study of plant tissues from the point of view of origin and rôle.

Not offered in 1931-32.

Textbook: Weaver and Clements, *Plant Ecology* (McGraw-Hill).

Prerequisites—Biology 1, 11, 31a.

Lectures, Monday and Friday at 10.
Laboratory, Friday 1-4.

Professor Earl.

BIOLOGY 36. ANIMAL ECOLOGY.

The physical and biological factors of the environment, succession, convergence, and associations. Practical applications of ecology.

Textbooks: Needham and Lloyd, *Life of Inland Waters* (Comstocks).

Chapman, *Animal Ecology* (McGraw-Hill).

Lectures, Monday, Wednesday, and Friday at 10.

Professor Klugh.

BIOLOGY 37. ECONOMIC ZOOLOGY.

Marine and fresh-water biology with special reference to the fisheries.

Prerequisites—Biology 2, 17, 36.

One lecture and four laboratory hours per week to be arranged.

Professor Klugh.

COURSES IN GENETICS

BIOLOGY 45. EVOLUTION AND GENETICS.

A consideration of data and concepts of organic evolution; the principles of genetics; exercises on variation and heredity in plants and animals.

Prerequisites—Biology 1 and 2.

Textbook: Babcock and Clausen, *Genetics in Relation to Agriculture* (McGraw-Hill).

Lectures, Monday, Wednesday, and Friday at 9.

Professor Earl.

GRADUATE COURSES

These courses will be given only when feasible and when suitably trained students apply.

BIOLOGY 110. DENDROLOGY.

A study of tree growth, structure and reproduction. The factors affecting the distribution of hardwood and softwood trees. Methods of harvesting and reproducing the timber crop. Identification of Canadian timber trees. The qualities of the various economic woods of Canada. The chief insect and fungal forest pests.

Prerequisites—Biology 1, 2, 11, 17 and 21.

Not offered in 1931-32.

Professor MacClement.

BIOLOGY 115. CYTOLOGY.

The structure and life-history of the cell.

Laboratory work, reading and conferences.

Prerequisites—Biology 1, 2, 11, and 16.

Hours to be arranged.

Professor Earl.

BIOLOGY 116. ADVANCED ECONOMIC ZOOLOGY.

The application of biology to the fisheries, game, fur-bearing animals, national parks, etc.

Prerequisites—Biology 1, 2, 17, 36, 37.

Hours to be arranged.

Professor Klugh.

BIOLOGY 117. ECONOMIC ENTOMOLOGY.

A study of the principal insect pests of the farm and forest, and methods of control.

Prerequisites—Biology 1, 2, 17, 36.

Hours to be arranged.

Professor Klugh.

BACTERIOLOGY

PROFESSOR—Guilford B. Reed, M.A., B.Sc., Ph.D.

REGULATIONS

1. Students on the old Pass course taking Biology as a Major may take as a part of the Biology prescription Bacteriology 10.
2. Students taking Biology as an Honour subject may elect as a part of the Biology prescription Bacteriology 10, 13a, and 20.

COURSES OF INSTRUCTION

BACTERIOLOGY 10.

An introductory course in general bacteriology, structure, physiology, fermentation and decomposition; a systematic study of the bacteria with particular reference to the pathogenic forms; infection and immunity.

Prerequisites: Biology 1, 2 and 13 or 21 and Chemistry 1.

Lectures, Wednesday and Friday at 9.

Laboratory, Wednesday, 1-4.

BACTERIOLOGY 13a. THE MICROBIOLOGY OF FOODS AND WATER SUPPLIES.

Hours to be arranged.

BACTERIOLOGY 20. RESEARCH IN BACTERIOLOGY.

GEOLOGY

PROFESSOR—M. B. Baker, B.A., B.Sc., F.G.S.A.

MILLER MEMORIAL RESEARCH PROFESSOR— E. L. Bruce, B.Sc., M.A., Ph.D., F.R.S.C., F.G.S.A.

ASSOCIATE PROFESSOR—B. Rose, B.Sc., Ph.D., F.R.S.C., F.G.S.A.

REGULATIONS

1. Mineralogy 1 is prerequisite to Geology 2 and 10. Mineralogy 2(i) is part of Geology 10. Geology 1 and 2 are prerequisite to Geology courses numbered 13, 17, 18, 19.

2. Students selecting Geology as one of the chief subjects on a Pass Course under new regulations will take Geology 1, 2 and Mineralogy 1.

If the Mineralogy is being counted under another group the third course will be Geology 10.

3. For Honours in Geology, students will select either the inorganic or the organic side, and take five or six courses from either of the following groups. Candidates making Geology their main Honour subject must include course 99. Honour students who have taken Mineralogy 1 and Geology 1 may take Geology 2 and 10 together.

A. Mineralogy 1 and Geology 1, 2, 10, 14, and 15.

B. Mineralogy 1 and Geology 1, 2, 13, 18, and 19.

COURSES OF INSTRUCTION

GEOLOGY 1. INTRODUCTORY COURSE IN PHYSIOGRAPHY AND GENERAL GEOLOGY.

The following topics indicate roughly the scope of the course: Forces operating on the earth's surface,—the atmospheric forces, streams, glaciers, waves, etc.; the land forms produced by these forces; volcanism; earth movements; structure of the earth's crust; mountain formation; kinds of rocks and their formation; fossils; outline of the history of the earth, including the evolution of its plant and animal life. In addition to those topics which are more particularly the province of Geology, consideration is given to the various types of topography and their method of formation, the atmosphere, its temperature, moisture and circulation, storms, climate, ocean currents, tides, etc., and, as far as time will permit, their influence on the human race will be indicated. This course will prove valuable to students who contemplate teaching Physical Geography in our schools.

The lectures are illustrated by maps, models, lantern slides, and specimens.

LABORATORY *WORK* will consist of the examination of typical specimens of fossil plants and animals, and of hand specimens of the more common rocks and minerals; together with the interpretation of geological maps, and types of topography. The laboratory work will also include field trips. It is therefore necessary that students should select their laboratory section on an afternoon on which they have no other laboratory period. The expenses of these trips are covered by the laboratory deposit.

Text-book: Norton, *Elements of Geology* (Ginn & Co.).

Lectures, Monday and Wednesday at 11.

Laboratory, two hours per week, in sections, to be arranged. See *note above.*

Professor Rose.

GEOLOGY 2. STRUCTURAL AND PHYSIOGRAPHICAL GEOLOGY, AND THE GEOLOGY OF CANADA.

(i) The principles of earth movements, deformation, faulting, mountain formation and volcanism are covered in a more general and more advanced way than in Geology 1.

(ii) Advanced consideration of surface processes, action of winds, streams, waves, glaciers, etc., various types of marine and continental sedimentation, and the development of land forms, map reading and interpretation.

(iii) In this course special attention will be given to stratigraphical Geology, and the distribution of the various rock formations in Canada. The topography as well as the structural make-up of the Dominion is studied. The climatic and economic differences of the various portions of Canada are explained.

Monday, Wednesday, and Friday at 9. Professor Rose.

GEOLOGY 10. ELEMENTARY PETROGRAPHY.

This course is essentially on igneous Geology and Petrography, and will consist of lectures and discussion on the geological occurrences of igneous rocks, the processes of crystallization from magmas, the forms assumed, the textures, and the metamorphic changes that are produced in the intrusive mass itself, and on its

surroundings. The lectures will be illustrated by projections of thin sections of rocks, and will be supplemented by laboratory work on hand specimens. Students taking this course will include Mineralogy 2 (i) as part of the work in the first term.

Text-books:

Luquer, *Minerals in Rock Sections.*

Pirsson, *Rocks and Rock Minerals.*

Lectures, Tuesday at 10, *Friday at* 11, second term.

Laboratory, Tuesday 2 to 4.

Professor Baker.

GEOLOGY 13. HISTORICAL GEOLOGY.

Continental evolution and geologic life development with special reference to North America.

Text-book: Schuchert, *Outlines of Historical Geology*, 2nd Ed. (John Wiley and Sons).

Tuesday and Thursday at 9. Professor Rose.

GEOLOGY 14. ADVANCED PETROGRAPHY.

A course of lectures will be given on the microscopic characters and classification of igneous rocks, and on their origin, geological form, and general field characters. The lecture work will be supplemented by assigned special reading and by laboratory work with both hand specimens and microscopic slides. Special attention will also be paid to the metamorphic rocks.

Monday at 2 *and* 3. Professor Baker.

GEOLOGY 15. ECONOMIC GEOLOGY.

The work in this class is an illustration of the principles of ore deposition. For this purpose type deposits in the largest producing districts throughout the world are studied in some detail. It is of course impossible to treat of all products, but the basis of classification and the fundamental principles underlying economic deposits are studied with particular reference to iron, copper, nickel, zinc, lead, silver, gold, aluminum, peat, coal, gas, oil, salt, abrasive and refractory materials. A few lectures on building stone, and on clays and the manufacture of clay products will be given.

Within one hundred miles of Kingston a greater variety of economic minerals and ores is mined than in any similar area in Canada, and possibly in the world. Through the kindness of the managers, advanced students may visit the various mines and thus gain valuable information regarding economic Geology.

Monday and Thursday at 10, *Tuesday at* 11. Professor Baker.

GEOLOGY 17. FIELD AND LABORATORY GEOLOGY.

The laboratory exercises in this course are designed to illustrate by means of specimens, models, photographs, maps, and sections, the principal original and secondary structures of rocks; the origin and mode of occurrence of rocks in the earth's crust, their cycles of alteration and change, their interpretation and representation in geological surveys and maps.

The field work comprises observations upon the weathering of rocks, shore phenomena, glacial phenomena, igneous and sedimentary rocks, faulting, folds, joints, cleavage, schistosity. It gives practice in methods of surveying; in geological mapping, and construction of sections; in measuring the thickness of strata; and in determining the relative ages of geological structures. The preparation of a map to scale from actual field work done by the student is required.

Five working hours a week will be arranged to suit the class at the beginning of the fall term.

Professor Rose.

GEOLOGY 18. SYSTEMATIC PALEONTOLOGY.

A study of invertebrate and vertebrate fossils, their classification, identification, and distribution, both geologic and geographic.

Text-book: Shimer, *Introduction to the Study of Fossils* (Macmillan).

Lectures, Tuesday and Thursday at 11.

Two laboratory hours a week to be arranged to suit students' time-table. Professor Rose.

GEOLOGY 19. STRATIGRAPHY.

The problems of sedimentation and the sedimentary rocks.

Reference Book: Grabau, *The Principles of Stratigraphy.*

Lecture, Wednesday at 10.

Four laboratory hours to be arranged. Professor Rose.

GEOLOGY 99. READING AND SEMINAR COURSE IN GEOLOGY FOR HONOUR STUDENTS.

The reading prescribed under this course will be adapted to the particular field of study in which the student is specializing. A departmental library is maintained for this purpose.

GRADUATE COURSES

Field excursions are required for all these courses.

GEOLOGY 113. PRINCIPLES OF PRE-CAMBRIAN GEOLOGY.

The origin, history and distribution of the rocks older than the Cambrian. Special attention will be given to the Canadian Pre-Cambrian areas. The course will be given in alternate years. It will not be offered in 1931-32.

Professor Bruce.

GEOLOGY 114. METAMORPHIC GEOLOGY.

Prerequisites as for 113.

A study of the changes that rocks undergo. Special attention will be paid to the origin of gneisses and schists. This course will alternate with Geology 113. It will not be given in 1931-32.

Lectures—Two hours a week.

Laboratory—Three hours a week.

Professor Bruce.

GEOLOGY 115. PRE-CAMBRIAN ORE DEPOSITS.

Discussion of ore deposits in Pre-Cambrian rocks with especially reference to those in Canada. The genesis and character of the deposits will be studied in detail.

Open only to graduate students.

Prerequisites—Geology 1 and 10, Mineralogy 1 and 11. It is advisable that Geology 15 shall also have been taken.

Lectures—Wednesday and Friday at 9.

Reading and Laboratory work—Thursday, 1.30-4.30.

Professor Bruce.

MINERALOGY

PROFESSOR—J. E. Hawley, B.A., M.A., Ph.D., F.G.S.A.

ASSISTANTS—G. A. Harcourt, Chas. S. Longley.

REGULATIONS

1. Students taking Mineralogy 1 must have matriculation in Chemistry or have passed in Chemistry 1 or take Chemistry 1 concurrently.

2. Students taking a Minor, a Major, or Honours in Mineralogy must include among their courses, besides the prescribed courses in Mineralogy itself, such courses in Geology, Chemistry and Physics as are necessary to secure proper preparation and balance. The details should be arranged in consultation with the Professor. Some of the requirements regarding courses in Geology to be included are stated below.

3. Mineralogy 1, 2, 11 and 12 or 13 must be taken in the order named and are prerequisite to all other courses in Mineralogy. The order in which the other courses are taken may be varied to suit the individual case. In special cases 2 and 11, 12, or 13 may be taken concurrently.

4. For a Minor a student will take Mineralogy 1, 2, 11, and Geology 1; for a Major a student will take Mineralogy 1, 2, 11, and 12 or 13 with Geology 1. For an Honours course a student will take at least 1, 2, 11, and one of 12, 13, 14, 15 or 16 with Geology 1. He may take Mineralogy 2 and 11 in the same session. If Mineralogy is the chief Honour subject a student must take Geology 1 with Mineralogy 1, 2, 11, 12, and two of the remaining courses offered. Candidates making Mineralogy their main Honour subject must include course 99.

Students selecting Mineralogy as one of their chief subjects under the new regulations for a Pass B.A. degree are required to take Mineralogy 1, 2 and 11. It is recommended that such students make Geology one of their other concentration groups.

5. Students in Mineralogy are expected to take part in the two field excursions which are made during October and November.

6. Each student in the department is supplied with a locked cabinet containing about 150 mineral specimens.

COURSES OF INSTRUCTION

MINERALOGY 1.

A course in Elementary Crystallography, Blowpipe Analysis and Descriptive and Determinative Mineralogy of about 100 common

or more important minerals together with practical work in their identification. The world distribution of minerals is also studied.

Prerequisite—Matriculation Chemistry or Chemistry 1, or Chemistry 1 taken concurrently.

Text-book: Ford, *Dana's Manual of Mineralogy*, 14th Ed. (John Wiley and Sons, Inc., New York. 1929).

Lectures: *Tuesday at* 10, *Friday* 2-4.

Professor Hawley and Assistants.

MINERALOGY 2.

(i) OPTICAL MINERALOGY.

Text: A. N. Winchell, *Elements of Optical Mineralogy*, 3rd Ed. (John Wiley and Sons, 1928).

(ii) PHYSICAL MINERALOGY AND CRYSTALLOGRAPHY.

An advanced course in the characters of crystals and crystal measurements.

Prerequisites—Mineralogy 1, Physics 1.

Lectures: *Thursday at* 10, *Friday at* 8, *first term; Monday at* 10, *Friday at* 10, *second term.*

Laboratory: *Two hours a week, to be arranged.*

Professor Hawley.

MINERALOGY 11. DESCRIPTIVE AND DETERMINATIVE MINERALOGY.

A course describing the properties, occurrence and uses of all the common minerals.

Prerequisites—Mineralogy 1 and 2. Students on an Honour Course may take courses 2 and 11 at the same time.

Lecture: *Wednesday at* 1.

Laboratory: *Wednesday*, 2 to 4.

Professor Hawley and Mr. Jolliffe.

MINERALOGY 12. ADVANCED DESCRIPTIVE AND DETERMINATIVE MINERALOGY.

A course covering the ore minerals, their properties, origin and distribution. In the laboratory an elementary course in Mineralography, the microscopic study of opaque minerals is given. This course will be offered in alternate years. It will alternate with Mineralogy 13. Given in session 1931-32.

Prerequisites as for Mineralogy 11.

Lectures: *Wednesday and Friday at* 11, *first term; Wednesday at* 11, *Friday at* 8, *second term.*

Laboratory—2 hours, to be arranged.

Professor Hawley.

MINERALOGY 13. MINERAL TECHNOLOGY.

A study of alloy minerals, abrasives, refractory materials, fertilizers, building stones, gem stones, etc. This course deals chiefly with the occurrence and utilization of the non-metallic minerals. This course will be given in alternate years. Offered in session 1932-1933.

Prerequisites, as for Mineralogy 11.

Lectures: *Wednesday and Friday at* 11, *first term; Wednesday at* 11, *Friday at* 8, second term.

Laboratory: *Friday*, 1-3. Professor Hawley.

MINERALOGY 14. MINERALOGRAPHY.

A more advanced study of opaque minerals with the metallographic microscope. Paragenesis of ores. Mineralogy 12 must be taken before or with this course.

Lectures and Laboratory: *Three hours a week, to be arranged.*

MINERALOGY 15. ADVANCED OPTICAL MINERALOGY.

Lectures and laboratory work on the optic properties of minerals. This course will be offered in alternate years with Mineralogy 16, or will be given each year if sufficient demand. In the latter case Mineralogy 16 would not be offered the same year.

Offered in session 1931-1932.

Lectures and Laboratory: *Three hours a week, to be arranged.*

Professor Hawley.

MINERALOGY 16. CHEMISTRY OF MINERALOGY.

A general survey of mineral density and of the processes involved in mineral deposition. A study of inversion phenomena, monotropy, enantiotropy, eutetics, solid solutions, and isomorphism, with their geological and technological significance. This course will be given in alternate years with Mineralogy 15.

Not offered in session 1931-1932.

Three hours a week, lectures and reading to be arranged.

Professor Hawley.

MINERALOGY 99. READING AND SEMINAR COURSE.

An advanced course for Honour students making Mineralogy their main subject.

Professor Hawley.

GRADUATE COURSES

I. REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

1. *Pre-requisite work.*. A candidate for the degree of Master of Arts must have taken the degree of Bachelor of Arts with Honours in two subjects in some preceding academic year.

2. *Application.* Application for permission to become a candidate for the degree of Master of Arts must be made to the Registrar. The applicant, if not a graduate of Queen's University, should send an official certificate giving full details of his previous academic training, including courses taken and grades received, together with a marked Calendar showing the content of the courses. He should also state in what field he desires to carry on his studies. The amount and distribution of work will be determined in each case by the Board of Studies on the basis of the general regulations contained in sections 3 and 4 below:

3. *Character of the work.* The degree of Master of Arts is given, not on the ground of general attainments, but in recognition of the candidate's wide knowledge of a special field of study. A candidate must ordinarily take advanced work in the two main subjects of his undergraduate Course. With special permission, however, he may concentrate on one of his special subjects or he may count work in a third related subject if it can be shown to belong to a consistent plan of study.

The work prescribed shall consist of the following:

(a) *Advanced* lecture courses.

(b) Directed special studies, with reports, essays, and conferences.

A thesis or other piece of independent work will be required from all candidates.

4. *Amount of work.* The work shall be the equivalent of four Honour courses beyond the standing required for the degree of Bachelor of Arts with Honours in two special subjects under the present system of studies. Those who do not qualify under this condition must complete such work as may be necessary to bring their standing to the level of B.A. with Honours in two subjects.

Those who have taken the degree of Bachelor of Arts with Honours in connection with the Special Course in Science for Teachers must bring their standing in two subjects up to the required level before being admitted to the course for M.A.

5. *Standing required.* The degree of Master of Arts will be conferred upon a student who, having satisfied the conditions mentioned above, makes at least sixty-six per cent. in each of the prescribed courses.

6. *Fees.* The fees charged are the same as for undergraduate work. See FEES.

7. *Attendance.* The minimum attendance required of M.A. candidates is one year.

Departmental outlines of work that may be counted towards the degree of Master of Arts are given below:

Details of courses referred to by numbers will be found under the various Departmental announcements.

Latin

Lecture course: 100.

Directed special studies in Virgil.

Greek

Lecture course: 109.

Directed special studies in Greek Art and Archaeology and in Greek Philosophy and Religion.

German

Lecture courses selected from 21a, 22b, 23a, 24b, 33a, or 36b if not counted towards B.A.

Directed work shall be done in a special field of study which shall be approved by the department. An acceptable thesis shall be written in duplicate embodying the results of independent investigation.

French

Lecture courses: 100, 105, 110, and 115. If only one of these is chosen it must be 110 or 115.

Directed special studies to be determined upon consideration of the candidate's previous Course.

Spanish

Lecture courses: Any courses numbered above 20.

Directed special studies based on:

(*a*) *Literatura Caballeresca.*

(*b*) *Escritores Místicos Españoles.*

(*c*) *Dramáticos contemporáneos a Lope de Vega.*

(*d*) *Calderón considerado como dramático religioso.*

(*e*) *Espronceda y la Sociedad Española de la Época Romántica.*

(*f*) *Literatura del Siglo de Oro.*

(*g*) *Autores Modernos.*

English

Lecture courses: 17a, 18, 20b, 22a, 24b, 28, 35a, 36b, 45a, 46b.

Directed Special Studies in one of the following:

Beowulf, English Prosody, Marlowe and Jonson, the Elizabethan Lyric, Sir Walter Scott, Browning and Tennyson, Thomas Hardy, Canadian and American Literature.

History

Courses are open in three fields of history:

A. EUROPEAN HISTORY. Courses 12, 14a, 15b.

B. BRITISH HISTORY. Courses 16, 18a, 19b.

C. CANADIAN HISTORY. Courses 20a, 21b, 25, 30a, 31b.

Candidates for the Master's degree may, at the option of the instructor, be required to do additional work to that prescribed for undergraduates enrolled in the same course.

Such of these courses in Canadian Hstory as shall be offered at the Canadian Archives at Ottawa in the summer may with advantage be taken there instead of at the University in the winter.

Directed Special Studies shall be pursued by each candidate upon a topic selected in one of these three fields. Upon the topic a thesis shall be written based in large measure on original sources.

Political and Economic Science

Lecture courses: A selection from the following courses: 10, 15a, 20a, 28b, 30, 33a, 34b.

Directed special studies in The Government of Canada, in Canadian Economic History, or in Problems in Banking, Trade or Finance.

Seminar courses offered in Honour B.A. prescription: Economics 92, and 94.

Philosophy

Lecture courses: Candidates should, after consultation with the department, choose courses from those numbered 25, 27, if not already taken, 28, 29, 44, 48.

Directed special studies: Candidates should, with the advice of the Department, select a field of work having a certain unity of interest, and their special subject for private study should be within this field.

Mathematics

Lecture courses: Any of the half-courses numbered from 20 to 34.

Directed special studies: Certain half-courses from 20 to 34 may be taken in the form of directed special studies, as advised by the Department and approved by the Board of Studies.

Physics

Lecture courses: A minimum of three lectures a week on topics selected from half-courses 27 to 34.

Directed special studies: Physics 35.

Chemistry

Lecture courses: Two full courses selected from 101b, 121, 106b, 145, 141, 171a.

Thesis and directed special studies selected from 201, 221, 231, 241, 261, 271.

Biology

Lecture and laboratory courses to be selected in consultation with the Head of the Department from 110 Dendrology, 113 Plant Pathology, 115 Cytology, 116 Advanced Economic Zoology, 117 Advanced Economic Entomology.

Geology

Lecture courses: 13 and 19 for those who have covered Honour Group A; or 10 and 15 for those who have covered Honour Group B. See section 4 of the Departmental Regulations.

Directed special studies in one of the fields of paleontology, stratigraphy, petrography, or petrology.

Graduate courses 113, 114, 115 under the Miller Memorial Research Foundation with Directed Special Studies in the field covered by those courses may also be elected for the Master's degree.

Mineralogy

Lecture courses: Two courses to be chosen from courses 11-16. By special arrangement certain courses in Geology may be substituted. See section 4 of the Departmental Regulations.

Directed special studies, on either metallic or non-metallic minerals, with Thesis.

THE DEGREE OF DOCTOR OF PHILOSOPHY

The University will accept candidates for the degree of Ph.D. only when it is satisfied that the Departments concerned are in a position to give the Course adequate attention and that the candidate is qualified to undertake the work.

A statement of the regulations governing the Course will be sent on application.

DEGREES, MEDALS, SCHOLARSHIPS, AND PRIZES

1930

DEGREES

HONORARY DEGREES

Degree of LL.D.

Connell, James C. .....Kingston, Ont.
Currie, General Sir Arthur W. .....Montreal, Que.
Ferguson, Honourable G. H. .....Toronto, Ont.
Fyfe, Principal W. Hamilton .....Kingston, Ont.
Insull, Samuel .....Chicago, Ill.
Leonard, Lt.-Col. Reuben W. .....St. Catharines, Ont.
O'Brien, Rev. Archbishop M. J. .....Kingston, Ont.
St. Laurent, Louis S. .....Quebec, P.Q.
Taschereau, Honourable Louis A. .....Quebec, P.Q.
Wallace, Dr. Robert C. .....Edmonton, Alta.

Degree of D.D.

Leckie, Neil McMillan .....St. Mary's, Ont.
MacOdrum, Donald .....Brockville, Ont.
Oliver, Rev. Edmund H. .....Saskatoon, Sask.

DEGREES BY EXAMINATIONS

Degree of Ph.D.

Harris, Alex. Logan, M.A. .....Geneva, N.Y.

Degree of M.A.

Barker, Walter E., B.A. .....Chapleau, Ont.
Carr, Austin Hope, B.A. .....Kingston, Ont.
Common, Sarah, B.A. .....Melville, Sask.
Craig, Jean Frances, B.A. .....Kingston, Ont.
Dimma, Robert E., B.A. .....Markham, Ont.
Elborn, Harold E., B.A. .....Stratford, Ont.
File, Celia B., B.A. .....Napanee, Ont.
Frost, Florence J., B.A. .....Hanover, Ont.
Graham, Alma J., B.A. .....Kingston, Ont.
Herron, Walter M., B.A. .....Lanark, Ont.
Lingard, Charles Cecil, B.A. .....Macklin, Sask.
MacKay, Donald C. G., B.A. .....Ottawa, Ont.
McNab, Murray C., B.A. .....Renfrew, Ont.
Pierce, Donald J., B.A. .....Timmins, Ont.
Stewart, John D., B.A. .....Kingston, Ont.
White, Mary Estelle, B.A. .....Kingston, Ont.

Degree of B.A. (with Honours)

Allan, Janet L. (English and History) ....Wroxeter, Ont.
Atkinson, Davis K. (Mathematics and Physics) . . ..Markham, Ont.
Baker, Allan G. (Philosophy and Economics) . . ..Perth, Ont.
Ball, Korleen E. (Spanish and French) ..Cornwall, Ont.
Brennan, M. Ursula (English and French) Deseronto, Ont.
Brown, Wm. Chapman (Mineralogy and Mathematics) .....Kingston, Ont.
Burchill, Chas. S. (English and History) ..Alameda, Sask.
Campbell, John N. (History and English) .Metcalfe, Ont.
Carson, Marjorie E. (History and English)Barrie, Ont.
Cawley, M. Helena (English and French)..Westport, Ont.
Charlesworth, E. H. (Chemistry and Biology) . . ..Harriston, Ont.
Clarke, Margaret E. (Spanish and French) Cornwall, Ont.
Clendinnen, Beatrice C. (Latin and Greek).Sarnia, Ont.
Cook, Wm. W. (Biology and Chemistry)...Erin, Ont.
Cooper, John C. (Latin and Greek) .....Parkhill, Ont.
Copp, Wm. R. (Science) .....Peterborough, Ont.
Cosgrove, Jas. E. (Economics and History).Richmond Hill, Ont.
Crich, Wilfred V. (Science) .....Tamworth, Ont.
Currier, J. Archibald (Mathematics and Economics) . . ..Toronto, Ont.
Danford, Gladys I. (Latin and Greek) ....Toronto, Ont.
Davidson, Helen E. (English and History) .Kingston, Ont.
Davis, M. Grace (English and French) ...Kingston, Ont.
de Renzy, Jessie I. (Biology and Chemistry)Braeside, Ont.
Earl, Edward L. (Science) .....Athens, Ont.
Earl, Mrs. Marion I. R. (English and French) . . ..Athens, Ont.
Ellis, Wm. J. S. (Science) .....Iroquois, Ont.
Ettinger, Karl F. (English and History) ..Hamilton, Ont.
Fleming, Earl A. (Mathematics and Physics)Ingersoll, Ont.
Forke, Mary G. (History and English) ...Ottawa, Ont.
Gould, Ford M. (History and English) ...Waterdown, Ont.
Grenzebach, Helen M. (English and History) .....Welland, Ont.
Groves, James W. (Biology and Chemistry)Ottawa, Ont.
Hall, Dorothy (French and English) .....North Bay, Ont.
Hammond, Lottie R. (English and French) .Atwood, Ont.
Harvey, Anna E. (English and History) ..Lyndhurst, Ont.
Hearne, E. Marie (Biology and Chemistry) .Burford, Ont.
Hern, Grant G. (Chemistry and Biology) ..St. Mary's, Ont.
Holmes, Stuart J. (Science) .....Spencerville, Ont.
Houlehan, Jean J. K. (English and History)Chesterville, Ont.
Hubbs, Helen Maria (English and History).Picton, Ont.
Hudson, Wilfred L. (Mathematics and Physics) .....Gananoque, Ont.
Jackson, Nelly G. (Latin and Greek) .....Elginburg, Ont.
Judge, Albert E. (Science) .....Burford, Ont.
Kay, Willard B. (English and History) ..Toronto, Ont.
Kelly, James W. (Science) .....Kingston, Ont.
Kennedy, Edna V. (English and French) ..Essex, Ont.

Kent, John H. (Latin and Greek) ..... Kingston, Ont.
Kindle, Edward D. (Geology and Biology) . Ottawa, Ont.
Kirk, Nina M. (English and History) ..... Hamilton, Ont.
Knight, Robt. R. (Latin and French)..... Square Hill, Sask.
Laing, Wm. Thos. (Mathematics and Physics) ..... Seaforth, Ont.
Lavell, W. Stewart (History and English) . Kingston, Ont.
Lockhardt, Andrew D.(History and English) . . .. Orillia, Ont.
Louden, Arthur H. (Biology and Chemistry) Iroquois, Ont.
Marcellus, J. Ernest (Science) ..... Milton, Ont.
Meiklejohn, Allen F. (English and History) Stirling, Ont.
Miller, V. Claude (Mathematics and Physics . . .. Avonmore, Ont.
Muirhead, Ida C. (English and French) ... Carleton Place, Ont.
MacAlpine, Jean G. (Science) ..... Kingston, Ont.
McCallum, Margaret R. (English and History) ..... Guelph, Ont.
McDougall, Luella M. (English and French) Brockville, Ont.
McFaddin, Margaret I. (History and English . ..... Stratford, Ont.
MacFarlane, D. Allan (Economics and History) ..... Almonte, Ont.
McGregor. Helen R. (Greek and Latin) .. Bowmanville, Ont.
McGuire, Veronica M.(English and French) Smith's Falls, Ont.
MacIntosh, Margaret C. (English and History) . ..... Campbellton, N.B.
McKenzie, Helen H. (English and French) . Gobles, Ont.
McKenzie,, Ruth I. (English and History) . Harriston, Ont.
MacKinnon, Catherine de V. (French and English) . . .. Toronto, Ont.
MacLean, Wm. McA. (English and French) Ottawa, Ont.
McQuade, Mary M. (Latin and Greek) .... Odessa, Ont.
MacVicar. Katherine B. (English and History) . . .. Utterson, Ont.
O'Connor. Claire M. V. (English and French) . . .. Dauphin, Manitoba.
Parkinson, Beatrice M. (Spanish and French) ..... Ottawa, Ont.
Perkin, Russell L. (History and English) .. Verona, Ont.
Phelan, Frances A. (English and French) . Port Rowan, Ont.
Porter. Gordon W. (English and History) . Lakefield, Ont.
Rae, Malcolm H. (English and History) . Port Hope, Ont.
Ramsay. Margaret J.(English and History) Bluevale, Ont.
Rand, Francis H. (English and French) .. Ilford, Essex, Eng.
Ranson, Eva M. (Science) ..... Prescott, Ont.
Robinson. Stephen G. B. (English and History) . ..... Kitchener, Ont.
Roche, Frank R. (History and English) .. Renfrew, Ont.
Royce, Jean I. (English and History) ... Kingston, Ont.
Rowe, George F. (Science) ..... Ottawa, Ont.
Scott, Winnifred E. (French and English) Auburndale. Mass.
Sexton. Ella B. (Latin and Greek) ..... Strathroy, Ont.
Shaw, Edna L. L. (English and History) . Arnprior, Ont.
Showman. Wallace H. (Latin and Greek) .. Alliance, Alta.
Skinner, Ruth A. (English and French) .. Toronto, Ont.

Smith, Donald C. (Economics and History) Smith's Falls, Ont.
Smith, Jennie A. (History and English) . Assiniboia, Sask.
Smyth, Alice C. (Biology and Chemistry) . South River, Ont.
Strong, A. Earle (History and English) . . Brighton, Ont.
Swaine, H. Alison (History and French) . . Westboro, Ont.
Thompson, Katherine M. (Spanish and French) . . . . . Ottawa, Ont.
Wannamaker, Gwendolyn (Mathematics and Economics) . . . . . Picton, Ont.
White, Wm. E. (Geology and Mineralogy) . Oshawa, Ont.
Watts, George S. (Economics and History) Kingston, Ont.
Williams, Melvin M. (History and English) Markham, Ont.
Wilson, Katharine E. (German and French) Guelph, Ont.
Wilson, Margaret R. (English and History) Perth, Ont.

Degree of B.A. (Pass)

Allison, Edith M. . . . . Bath, Ont.
Bateson, Grace M. . . . . Lindsay, Ont.
Beale, Hubert P. . . . . Athens, Ont.
Beech, Eugene L. . . . . Bowmanville, Ont.
Beer, James W. . . . . Winnipeg, Man.
Bingham, Gordon R. . . . . Montreal, Que.
Brachman, Ben. . . . . Edenwold, Sask.
Brown, C. Lawrence . . . . . Brockville, Ont.
Carter, Dorothy M. . . . . Picton, Ont.
Chanonhouse, Agnes E. . . . . Eganville, Ont.
Cleland, Margaret O. . . . . Listowel, Ont.
Cringle, Wm. J. . . . . Toronto, Ont.
Currie, Mary W. . . . . Ottawa, Ont.
DeClaire, Mary (Sr. Mary Honorina) . . . Windsor, Ont.
Delve, Wm. T. R. . . . . Lyn, Ont.
Derry, Mary K. . . . . Renfrew, Ont.
Dinner, Wm. J. . . . . Bracebridge, Ont.
Erskine, Annie L. . . . . Monkton, Ont.
Faust, Anna J. . . . . Wadena, Sask.
Fawcett, John W. . . . . Harriston, Ont.
Fisher, Wm. A. . . . . Cobourg, Ont.
Fraser, Hugh . . . . . Kingston, Ont.
Garvin, Mary K. (Sr. St. Gabriel of the Angels) . . . . . Westport, Ont.
Gaynor, Dan. D. . . . . Toronto, Ont.
Gibson, Charlotte A. . . . . Regina, Sask.
Gilbert, Mildred A. . . . . Kingston, Ont.
Goodfellow, Ruth M. . . . . Williamstown, Ont.
Greenwood, Frederick D. . . . . New Liskeard, Ont.
Hawke, Doris E. . . . . Gananoque, Ont.
Hawkins, Winona E. . . . . Regina, Sask.
Henderson, Agnes L. . . . . Brockville, Ont.
Hennessy, Emily W. . . . . Westmeath, Ont.
Hillmer, Elizabeth A. . . . . Southampton, Ont.
Hogarth, Evelyn R. . . . . Hamilton, Ont.
Hough, J. Butler . . . . . Madoc, Ont.
Hubbs, Alma N. . . . . Picton, Ont.
Hughes, Edna L. . . . . Kemptville, Ont.

Irwin, Amy R. ..... Deseronto, Ont.
Johnson, Howard A. ..... Niagara Falls, Ont.
Kavanaugh, Margaret E. ..... Iroquois, Ont.
Kennedy, Clifford E. ..... Lindsay, Ont.
Kennedy, K. Elliott ..... North Bay, Ont.
Kerfoot, Margaret L. ..... Prescott, Ont.
Lick, Marion G. ..... Oshawa, Ont.
Longmore, Margery J. ..... Campbellford, Ont.
Lovell, Wm. L. ..... Gorrie, Ont.
Matthews, Lorne H. ..... Ottawa, Ont.
Miller, Barbara C. ..... Ashburn, Ont.
Moffitt, Emma E. ..... Coldwater, Ont.
Munro, Joseph E. R. ..... Peterborough, Ont.
McAlpine, Corille A. ..... Lorneville, Ont.
McCarthy, Eileen M. M. ..... Prescott, Ont.
McConnell, Leila M. ..... Finch, Ont.
McCreary, Kathleen H. ..... Pakenham, Ont.
McDonald, Ruby ..... Winchester, Ont.
Macfarlane, Elsie M. ..... Outremont, Quebec.
MacIlraith, Kenneth M. ..... Ottawa, Ont.
McKee, Muriel J. ..... Kingston, Ont.
McKelvey, Gilbert J. ..... Kingston, Ont.
McKinlay, Mary E. ..... Blenheim, Ont.
MacLeod, Catherine ..... Maxville, Ont.
McNab, Katherine ..... Renfrew, Ont.
McVittie, William Roy ..... Southampton, Ont.
McWilliam, Helen M. S. ..... Goshen, N.Y.
Nettleton, Edward O. D. ..... Prescott, Ont.
Nichol, Alma J. ..... Ottawa, Ont.
Nickel, Oscar H. ..... Listowel, Ont.
Nolan, Mary A. (Sr. Mary Rosalie) ..... Windsor, Ont.
Pense, Margaret V. ..... Kingston, Ont.
Percival, Wm. V. ..... Kingston, Ont.
Phimister, Zac. S. ..... Newmarket, Ont.
Polly, Larmour L. ..... Jasper, Ont.
Purcell, Margaret I. ..... Cobden, Ont.
Reid, Norma J. ..... Ottawa, Ont.
Reid, Rossa L. ..... Bancroft, Ont.
Richards, Marion A. ..... Westboro, Ont.
Ross, Redvers M. ..... Belleville, Ont.
Ruttle, Edith L. ..... Carleton Place, Ont.
Schacter, Leo E. ..... North Bay, Ont.
Servage, Wm. A. ..... Winchester, Ont.
Sinclair, Robert J. ..... Tillsonburg, Ont.
Smith, Douglas A. ..... Kingston, Ont.
Smyth, E. Kathleen ..... Iroquois, Ont.
Stevenson, Helen J. ..... Toronto, Ont.
Story, Robert E. ..... Toronto, Ont.
Susman, Benjamin R. ..... Kingston, Ont.
Tingley, Annie L. ..... Vancouver, B.C.
Tompkins, Mayme ..... Lindsay, Ont.
Thomson, Marguerite ..... Montreal, Que.
Weir, Irene V. ..... Kingston, Ont.
White, M. Florence ..... Spencerville, Ont.
Whittle, Robert S. ..... Welland, Ont.

Wigham, Thomas C. V ..... Toronto, Ont.
Wilson, David M. ..... Saskatoon, Sask.
Zufelt, Verne E. R. ..... Oshawa, Ont.

Degree of B. Com.

Adams, Francis E. ..... Belleville, Ont.
Bercuson, Joseph H. ..... Calgary, Alta.
Black, Helen M. ..... Toronto, Ont.
Brewster, Walter D., Jr. ..... Ridgeway, Ont.
Britton, James C. ..... Toronto, Ont.
Brown, Morgan ..... Leamington, Ont.
Butler, Norris E. ..... Orillia, Ont.
Cunningham, Paul H. ..... Kingston, Ont.
Currie, Archibald W., B.A. ..... Parhkill, Ont.
Deans, Matthew C. ..... Sprucedale, Ont.
Doolittle, Thos. L. ..... Wallaceburg, Ont.
Dorland, Ray O. ..... St. Catharines, Ont.
Flegg, Herbert C. ..... Edmonton, Alta.
Fortune, Francis J. ..... Mallorytown, Ont.
Frost, Alfred J. ..... Hanover, Ont.
Gilliland, Walter L. ..... Woodstock, N.B.
Graham, Sarah E. ..... Richmond, Ont.
Gray, Hugh B. ..... Kingston, Ont.
Ingersoll, Gerald M. ..... Ottawa, Ont.
Ketcheson, Gordon L. ..... Belleville, Ont.
Kolle, Wm. J. ..... Vancouver, B.C.
Lavell, Richard M., B.A. ..... Kingston, Ont.
Morton, Arthur E. ..... Richmond, Ont.
Moxley, Donald J. ..... Lansdowne, Ont.
McIlraith, James R. A. ..... Cobourg, Ont.
MacMillan, Duncan H. ..... Lindsay, Ont.
McPeake, Emma ..... Sault Ste. Marie, Ont.
O'Brien, George D. ..... Kingston, Ont.
Parr, Clare K. ..... North Bay, Ont.
Purdon, Andrew ..... Hamilton, Ont.
Richmond, John G. ..... Hamilton, Ont.
Snyder, Henry W. ..... Waterloo, Ont.
Stabback, Inez ..... Toronto, Ont.
Voaden, Fred W. ..... St. Thomas, Ont.
Walker, Laura M. ..... Perth, Ont.

Degree of B.D.

Ransom, Arthur B., B.A. ..... Beverly, Mass.

SCHOLARSHIPS AND PRIZES

Scholarship of the Canadian Federation of University Women . . . . . Mary E. White, M.A., Kingston, Ont.

Welch Scholarship . . . . . Jessie C. Ward, Kingston, Ont.

The McIver Scholarship . . . . . Douglas M. Westington, Cobourg, Ont.

M. C. Cameron Prize in Gaelic . . . . .

First . . . . . Edith A. Ferguson, Maxville, Ont.

Second . . . . . Catherine MacLeod, Maxville, Ont.

Latin Composition Prize . . . . . Walter H. Showman, Alliance, Alta.

Maclennan Scholarship in Greek 2 . . . . . Moray St. John Macphail Kingston, Ont.

Douglas M. Westington, Cobourg, Ont.

Robert Bruce Scholarship in Arts . . . . . H. A. Mantle, Grimsby, Ont.

Edith L. Carscallen (by reversion) Bartonville, Ont.

Sir Wilfrid Laurier Memorial Scholarship in French Conversation . . . . . Margaret H. O'Connor, Kingston, Ont.

Alexander Laird Scholarship in English 1. H. A. Mantle, Grimsby, Ont.

Thos. C. Robinson, Battle Creek, Mich.

McIlquham Foundation in English . . . . . Kathleen J. Earle, Mallorytown, Ont.

Robert R. Knight, Kingston, Ont.

Andrew Haydon Scholarship in Colonial History . . . . . M. Jean Cross, Morrisburg, Ont.

Eva H. McMahon, Hanover, Ont.

W. M. O. Lochead Scholarship in Economics. Awarded in Economics 1 . . . . . Wm. A. Spencer, Peterborough, Ont.

Adam Shortt Scholarship in Political Science. Awarded in Economics 2. . . . . Eileen Engler, Ottawa, Ont.

P. D. Ross Scholarship in Commerce . . . . . Eva Abramsky, Kingston, Ont.

N. F. Dupuis Scholarship in Mathematics T. E. Rae Green, Paris, Ont.

Arts '15 Scholarship . . . . . Wm. J. Henderson, Wingham, Ont.

William Moffatt Scholarship in 1st year Chemistry . . . . . Wm. J. Henderson, Wingham, Ont.

Greek Composition Prize . . . . . John H. Kent, Kingston, Ont.

Special Prize in German 2 . . . . . Ilse P. Schroeder, Sudbury, Ont.

Special Prize in French 2 . . . . . Charles J. Ireton, Forester's Falls, Ont.

Special Prize in Spanish 1 ..... Helen Tully, Picton, Ont.
Gowan Foundation No. I ..... James S. Craig, Ottawa, Ont.
Gowan Foundation No. III ..... James E. Cosgrove, Richmond Hill, Ont.
Mary Fraser McLennan Prize in Hebrew 1 .. A. Walton March, Carbonear, Newfoundland.
James C. Rogers Prize in English 2 ..... Mrs. Amy Smith, New Rochelle, N.Y.
Special Prizes in Greek A
First ..... Alice E. Babcook, Hartington, Ont.
Second ..... Anne C. Johnson, Valentia, Ont.

MEDALS

Medal in Latin ..... Nelly Gertrude Jackson, B.A., Elginburg, Ont.
Medal in Greek ..... Beatrice C. Clendinnen, Sarnia, Ont.
Medal in German ..... Katherine E. Wilson, B.A., Guelph, Ont.
Medal in French ..... Robert R. Knight, B.A., Kingston, Ont.
Medal in English ..... Janet L. Allan. B.A., Wroxeter, Ont.
Medal in History ..... Andrew D. Lockhardt, Orillia, Ont.
Medal in Mathematics ..... Wm. C. Brown, Chesterville, Ont.
Medal in Chemistry ..... E. Harold Charlesworth, B.A., Harriston, Ont.
Medal in Biology ..... E. Marie Hearne, B.A., Burford, Ont.
Medal in Geology ..... William E. White. B.A., Oshawa, Ont.

FELLOWSHIPS

ARTS RESEARCH FELLOWSHIPS—

Travelling:

Divided between John S. M. Allely,
Lindsay, Ont.
and Allan G. Baker, Value $500.
Perth, Ont.

Resident:

Edward Harold Charlesworth,
Harriston, Ont. . . . . Value $500.

Beatrice Colby Clendinnen,
Sarnia, Ont. . . . . Value $250.

Margaret Catherine MacIntosh,
Campbellton, N.B. . . . . Value $250.

SIR JAMES AIKINS FELLOWSHIP IN CANADIAN HISTORY—

Andrew Donald Lockhardt, Orillia, Ont. . . . Value $500.
(plus $250 from University)

(12) 15 36-1